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# SUNY Buffalo State Faculty and Administrator Perceptions of Using Electronic Portfolios for Promotion and Tenure Reviews

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**Abstract**

Electronic portfolios are used at many institutions of higher education in the United States for faculty tenure and promotion reviews. Commonly referred to as an e-portfolio, their purpose is to replace traditional paper portfolios with electronic portfolios which can be viewed online and are easily shared. Though e-portfolios can be used for many purposes, this study will focus on their application in the tenure and promotion process. The purpose of this research is to gather faculty and administrator views towards utilizing e-portfolios for promotion and tenure reviews at Buffalo State. With the expected benefits e-portfolios offer, they will likely be a future consideration for the college.

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# Chapter I: Introduction

## a. Introduction

This study examines faculty and administrator views towards utilizing e-portfolios for faculty promotion and tenure reviews at Buffalo State. As more tasks are moving to web-based platforms, there may be benefits of e-portfolios for promotion and tenure review.

Assistant professor is the beginning tenure track rank at Buffalo State, followed by associate professor, and then professor. Tenure track appointments can be made for one, two, or three year terms, with the goal of receiving tenure within seven years. The tenure decision is made before the start of the employee's sixth year. In accordance with The State University of New York Policies of the Board of Trustees (The State University of New York [SUNY] 2014), appointment of employees is made by the chief administrative officer of the college. At Buffalo State, faculty appointments and reappointments are made by the provost, while recommendations for promotion and continuing appointment (tenure) are made by the president. The SUNY Chancellor has final authority for granting continuing appointments.

When a faculty member is being considered for reappointment, promotion or tenure, the policies established by the State University of New York (SUNY) and the collective bargaining agreement between the State of New York and United University Professions (UUP) must be followed. These policies are explicit, extensive and will only be covered briefly here. In general, criteria used to evaluate faculty applying for promotion or tenure consists of mastery and growth in: Effectiveness in Teaching (including student evaluations); Research, Scholarship and Creative Activity; and College, Professional and Public Service. Faculty provide documentation demonstrating their progress in meeting or exceeding these expectations. Their

information is evaluated beginning with the personnel committee in their home department, and successive recommendations are made by the department chair; the dean; the provost; and ending with the campus president.

Electronic or e-portfolios offer an attractive alternative to the conventional paper dossier. E-portfolios can be viewed online, anytime, and anywhere there is the appropriate computer access. Benefits include a more dynamic portfolio that is easily shared, easily modified, and results in significant paper and space savings.

Advances in technology have allowed Buffalo State to institute innovative practices on campus such as the online recruitment system, PeopleAdmin. Conducting a search for a vacancy at the college was once a cumbersome and time consuming paper process. At each stage in the search process that required review and approval, two paper copies were shuffled from the search committee to the dean's office for signature, then to the Office of Equity and Diversity for signature, and then to the provost's office for signature. Once these documents left the search committee, its members had no idea where they were in the approval process. It could take weeks before approvals went through all the offices, which sometimes resulted in promising candidates taking jobs elsewhere. Eventually, steps were taken to convert to an electronic recruitment system. This conversion resulted in greater efficiency. Recruitment records are now stored on a central server which allows users to check on the status of faculty and staff searches from their own computer, allows reviewers to transmit approvals electronically, saves paper, shortens the length of time through the approval chain, and creates historical electronic search records that are easily retrieved online. E-portfolio technology for promotion and tenure holds a similar promise. The difference, however, is that unlike the hiring process, tenure and promotion affects the future of employees who have already been hired at Buffalo State. Use of e-portfolios

may cause concerns for employees, such as privacy and training issues. Tenure status or comfort level with new technology will likely influence individual perspectives. By gathering Buffalo State faculty and administrators' opinions towards adoption of this technology, the researcher can identify common viewpoints that emerge.

**b. Statement of Problem and Purpose of Study**

Buffalo State currently uses a paper process for review of faculty personnel actions. Faculty members assemble a large volume of information to support their requested action. Documents are separated into two files: File A contains required personnel documents and File B - which contains supporting documentation. File A is specific, consisting of the candidate's statement of accomplishments, curriculum vitae, and evaluations by their personnel committee and department chair. Documents in File A become part of their permanent personnel file. File B contains supporting evidence and is very individualized. It is not unusual for documentation in File B to comprise several large, three-ring binders. Hundreds, if not thousands, of pages of documentation may be provided, including books, CDs, publications, student evaluations and more. Each candidate's File B is unique to them and is returned at the end of the review. Because of the volume of information presented, only one print copy is provided for those involved in the review.

Having one print copy of promotion and tenure applications creates inefficiency in the process for many reasons. First, only one person at a time can review the dossier. Personnel committees are generally comprised of many individuals who must report to a central location to review dossiers. Second, because of their size, dossiers are heavy, bulky and take up space. Dean's offices may receive 10 to 20 applications in a review cycle and must find space to keep

all the binders. Third, dossiers are not easily transported from office to office, and carts are generally required to move them. Fourth, they are not environmentally friendly because everything is provided in paper. And, fifth, dossiers are not easily updated or revised.

E-portfolio technology may be a future consideration for faculty and administrators at Buffalo State, because their benefits can create efficiencies in the process.

### c. Significance of Study

Knowing faculty and administrator views on e-portfolio technology for promotion and tenure reviews can inform stakeholders on whether this process should be pursued in the future. Currently, their views are unknown. By developing an innovativeness profile of respondents, the usefulness of this study can also be extended to the rate at which technological innovations may be accepted at Buffalo State.

## Chapter II: Review of Related Literature

### a. Introduction

The review of literature begins with the definition of e-portfolios, their advantages and disadvantages, and types of platforms available. The researcher will also examine the use of e-portfolios at selected SUNY colleges and discuss Everett Rogers' diffusion of innovations research.

### b. Review and Critique of Literature

**Defining the E-portfolio:**

Batson (2002) defines an e-portfolio as an electronic compilation of an individual's accomplishments and completed works. DiChallis (2005) more specifically defines an e-portfolio as:

- selective and structured collection of information
- gathered for specific purposes and showing/evidencing one's accomplishments and growth which are
- stored digitally and managed by appropriate software
- developed by using appropriate multimedia and customarily within a web environment and
- retrieved from a website, or delivered by CD-ROM or DVD. (para. 8)

According to Barrett (2005, p. 5) "an electronic portfolio uses electronic technologies as the container, allowing students/teachers to collect and organize portfolio artifacts in many media

types (audio, video, graphics, text); and using hypertext links to organize the material, connecting evidence to appropriate outcomes, goals or standards." Additionally, e-portfolios encourage the user to assess and reflect on their work (Barrett, 2005). The assurance of privacy and controlled access is extremely important in any e-portfolio platform under consideration for personnel reviews.

Portfolios are not a new concept. In higher education, student portfolios have been in use since the mid-80s and gained prominence in the mid-90s (Lorenzo & Ittelson, 2005). In the beginning, art students were the primary users of portfolios, building collections of their artwork. As technology advanced and internet use expanded, student portfolios have moved to an electronic form. Batson (2002) describes three trends that have brought about the electronic portfolio boom: 1) student work is mostly in electronic form; 2) students have ready access to the internet; and 3) databases are dynamic and allow for the management of large volumes of work.

E-portfolios are especially popular in teacher education programs because they allow students to showcase their work, document skills, and can be used as a job-finding tool. Faculty members may use teaching e-portfolios as a way to introduce themselves to students, document skills and accomplishments, and for critical reflection. Another application of e-portfolios in higher education is for institutional self-study and reaccreditation purposes. (Lorenzo & Ittelson, 2005). One thing is certain, technological advances have become significantly integrated into our lives and workplace, and this trend will not stop. The Millennial generation, those born between the early 1980s and 2000, have been immersed in technology from the outset. According to Experian Marketing Services (Oakes, 2015):

> "Millennials are the first generation to spend more time with digital media than traditional ones, spending 35 and 32 hours per week, respectively, using each. They are also more likely than older generations to use their smartphones for social networking, watching video and using mobile GPS. Half say they need constant Internet access throughout the day and 43 percent say they access the Internet more through their phones than through a computer. Among smartphone owners, half are mobile dominant when it comes to going online. This all points to a need — not a desire — for connectivity and an embracing of the newest technology available."

For Millennials, some of whom are now or will become faculty members, e-portfolios are a natural extension of the technology tools they use every day.

**E-portfolio Platforms**

There are four main approaches for e-portfolio utilization.

- Homegrown System: An institution develops its own system in-house.
- Open Source System: Available to the public at no charge. Examples include Mahara Moodle, and Sakai.
- Commercial System: Purchased through a vendor. Examples include TaskStream and Digital Measures.
- Common Software Tools: Using common HTML tools on one's computer, such as Microsoft Front Page or Dreamweaver, to assist in development (Lorenzo & Ittelson, 2005).

Depending upon the consumer's needs and capabilities, a full examination of each would be required in order to determine the best choice.

**E-portfolios at Institutions of Higher Education**

A wide range of public and private colleges and universities currently use e-portfolios for personnel reviews. A small sample follows:

- University of Missouri, Kansas City (MoSpace)
- University of Wisconsin – LaCrosse (Digital Measures);
- Temple University (Blackboard);
- University of Florida (PeopleSoft);
- University of Houston (Sharepoint);
- University of Rhode Island (Sakai – Open Source)

In 2008, University of Illinois at Urbana-Champaign formed an ad-hoc committee to explore the use of electronic tools for promotion and tenure. In their final report (2007-2008), they recommended three inter-linked components be incorporated with direction by the Chief Information Officer.

1) Faculty e-portfolio containing professional activity information and managed by faculty.

2) P&T ePackage that is a digital version of the requirements for promotion and tenure dossiers per provost's office guidelines.

3) P&T eProcess that is automated and allows the addition of data at each review stage. Automating the workflow is recommended for long-term value.

Additional recommendations include a system that will support other processes, such as collecting data for accreditation; be interoperable with other systems on campus; and has the ability to support future functional development.

Betsy L. Morgan, PhD, is a full professor of psychology at the University of Wisconsin-La Crosse (UW-L). The university has adopted e-portfolios for faculty personnel reviews. With the experience of converting to e-portfolios behind her, Morgan (2011) offers recommendations regarding the transition.

- Assemble a cross-disciplinary team.
- Get information technology on board early.
- Determine rollout speed – the whole campus or one department first.
- Leadership matters – senior administration and faculty leadership is essential.
- A faculty liaison is necessary with knowledge of personnel process to interact with vendor.
- "Mind the Gap" – recognize that some faculty members have limited technology skills.
- Offer ongoing training.
- Security – must address security issues while maintaining access control.
- Establish a limit on the size of the e-portfolio.

Morgan (2011) goes on to cite the cost of the vendor and a campus support person as major drawbacks, along with frustration and downtime when problems arise. As benefits, Morgan cites

the ease of data queries, the ability to review files from home or the office, and having data organized in one format which is easily updated over time. Additionally, reviewers appreciated that information could be retrieved systematically. She describes one of the most significant benefits as the ability to organize materials in one place (para 17). Morgan closes with this overall summary "the process of converting to electronic portfolios prompted a series of decisions that helped clarify some of the muddier points of personnel review at our university, and made the review of portfolios more effective and accessible." (para 17)

**E-portfolios at State University of New York**

The State University of New York (SUNY) is comprised of 64 institutions of higher education. Of these, 13 are university colleges, including Buffalo State. To benchmark where Buffalo State is in relation to its peers in SUNY, the researcher contacted Academic Affairs Offices at the other comprehensive colleges to inquire about their e-portfolio use for tenure and promotion reviews. Findings are summarized in Table 1:

**Table 1: Survey of SUNY Comprehensive Colleges, September 2014**

| SUNY Institution | Are you currently using e-portfolios or other electronic method for faculty reviews? | Are you planning to use e-portfolios or other electronic methods for faculty reviews in the next 1-3 years. | Additional Comments |
|---|---|---|---|
| Fredonia | No | Yes | Currently use Digital Measures for student portfolios and report generation. Tools are in place to convert from paper process to electronic, but no firm initiative in place yet. |
| Oneonta | Yes, optional | | Using Angel currently, but phasing out to Blackboard. Can create and view portfolios online. |
| Cortland | No | Not to respondent's knowledge | Respondent indicated a clear desire to move to an electronic method. |
| Purchase | No | Not to respondent's knowledge | |
| Brockport | No | Probably | A faculty member piloted one about 2 years ago. The college has had a change in provosts over the past couple of years and believes the initiative will be restarted. |
| Oswego | Yes, optional | | In use for 3-4 years using Google docs. Approximately 25% of faculty choose to submit electronically. |
| Potsdam | Yes, optional (CD) | | Respondent did not know software platform. Faculty members submit on a CD |
| Geneseo | No | Yes | Provost's office initiative that is in discussion stages. Faculty supportive. |
| Plattsburgh | No | Not to respondent's knowledge | |
| Old Westbury | No | Not to respondent's knowledge | |

Though the majority of respondents are not using electronic methods at this time, results suggest the percentage will increase over the next few years.

**Everett Rogers' Diffusion Research**

Everett Rogers' "Diffusion of Innovations" research tells us that when an innovation is introduced to a target population, we can expect the rate of adoption to follow a standard pattern. According to Rogers, the rate of adoption is "the relative speed with which an innovation is adopted by members of a social system." (Rogers, 1995, p. 22). Diffusion is defined as "the process by which an innovation is communicated through certain channels over time among the members of a social system" (Rogers, 1995, p. 5). Rogers goes on to say an innovation is something new as perceived by the individual(s) who is adopting it. It does not have to be recently discovered. It could be an idea or practice that has been in use elsewhere for some time. However, "if the idea seems new to the individual, it is an innovation." (Rogers, 1995, pg. 11)

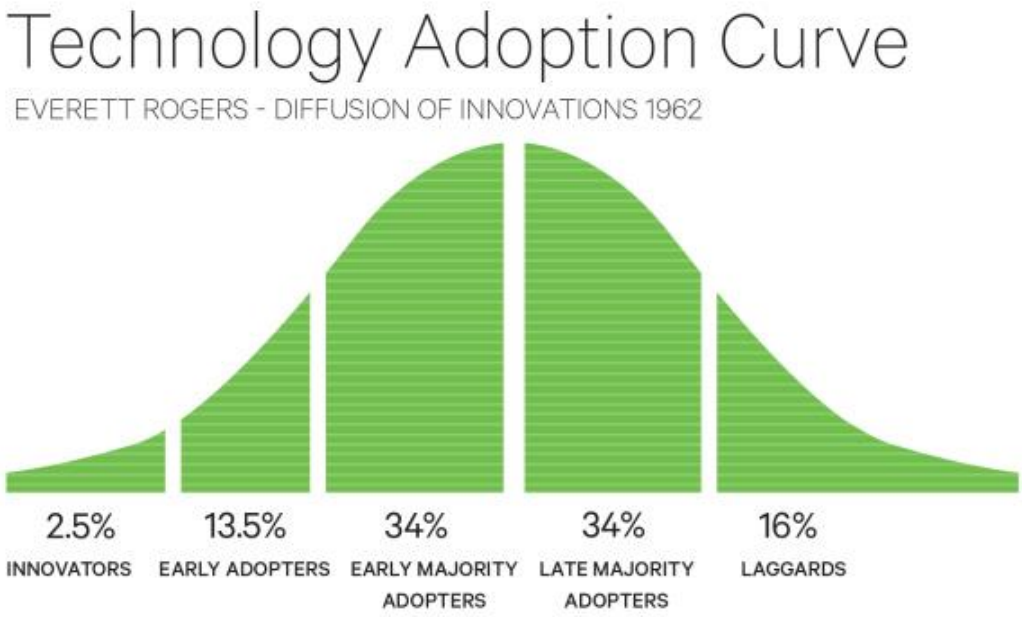
Rogers' (1995) describes five adopter categories based on an individual's innovativeness. He defines this as the degree to which an individual adopts a new idea earlier than the other members of the group. He goes on to say that it is relative, in that individuals will have varying levels of innovativeness within the group, and it's also a simplification that assists in comprehending human behavior. In general, Rogers' describes the ideal types for each category as follows (Rogers, 1995, p. 263-266):

- Innovators: the first to adopt an innovation, risk takers, venturesome.
- Early Adopters: second fastest group to adopt an innovation, opinion leaders, respected.
- Early Majority Adopters: this group takes longer to adopt than the above two categories, seldom opinion leaders, deliberate.
- Late Majority Adopters: this group doesn't adopt until after the majority does, highly skeptical.

- Laggards: the last to adopt, have aversion to change, advanced in age, traditionalists.

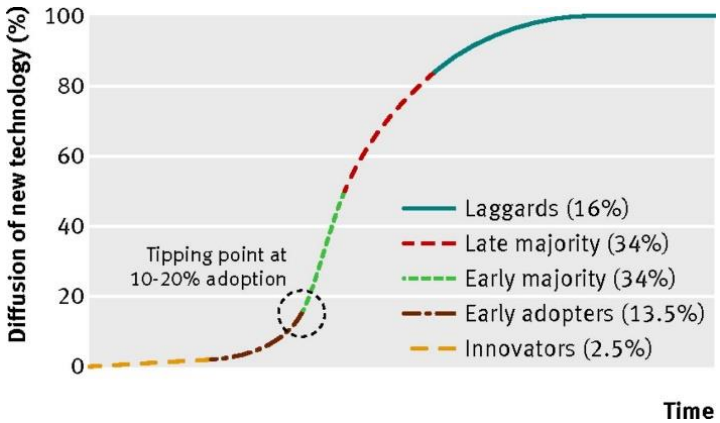
Rogers' (1995) diffusion research has shown that the adoption of an innovation generally follows a bell-shaped curve when plotted on a frequency basis (Figure 1), and an s-shaped curve when the cumulative number of adopters is plotted over time (Figure 2).

**Figure 1: Everett Rogers Technology Adoption Bell Shaped Curve**




http://blog.taitradio.com/2014/06/17/technology-upgrade-getting-the-human-component-right/

**Figure 2: Everett Rogers Technology Adoption S-Shaped Curve**




http://www.bmj.com/content/346/bmj.f3011

According to Rogers, the key to convincing others to adopt a new technology, is to target the Innovators and Early Adopters. Based on Rogers' research, the researcher could expect that the introduction of e-portfolios to Buffalo State faculty and administrators for promotion and tenure reviews (the innovation) will not at first be widely embraced. Approximately 16% of Buffalo State faculty should fall into the innovator and early adopter categories and be very receptive to converting to this new technology; however, the remaining will likely be cautious (early majority adopters), skeptical (late majority adopters) or completely against it (laggards).

**c. Summary**

In order to inform decision makers, an examination of the advantages and disadvantages of e-portfolios should be undertaken. Some factors to be taken into consideration follow.

**Advantages**

What specific benefits do e-portfolios offer over traditional portfolios in the tenure and promotion process? In a comparison by Kelly and Lewenson (2010) six areas were identified.

1. Ease of Use: E-portfolios are easily accessed and updated. It is an ongoing process, allowing faculty members to continuously update their dossiers. They allow for archival information. They allow for more creativity in the process. They allow the user to import PDF files, video, photos or any other multimedia enhancements. They are easily shared.
2. Cost Factors: This could vary widely. An institution may already have a software license that allows for e-portfolio technology or they may have to purchase a system from a vendor.
3. Time Elements: Faculty can update and refine throughout the year.

4. Meetings: It is possible to use discussion boards to reduce face-to-face meetings when desired.
5. Location: Dossiers can be accessed by computer from any location at any time.
6. Repository Issues: Each faculty member has their own site which serves as an ongoing repository. You are not limited to showing accomplishments one year at a time.

**Disadvantages**

Though e-portfolios offer many advantages, there are also drawbacks. Tina Ashford (2005), assistant professor of information technology at Macon State College points out several key issues.

- Privacy concerns must be considered. E-portfolios contain personal and sensitive information, therefore, privacy is essential. The institution must be able to control access.
- If a faculty member is not familiar or comfortable with technology, they may be at a disadvantage.
- Support and training will be needed.

Another concern is whether resistance to adoption of e-portfolios for tenure and promotion reviews will be encountered. Will resistance come from faculty, administrators, or both? Here, Rogers' Diffusion of Innovations research can be helpful in understanding the expected acceptance rate of e-portfolios for tenure and promotion files at Buffalo State.

## Chapter III: Methodology

### a. Design of Study

A web-based survey will be designed. Survey questions will be developed to assess views towards adoption of this technology. Questions will also be included to measure innovativeness among the target population. Results will be analyzed (using SPSS) by faculty rank, tenured/tenure-track, department chairs, and administration.

### Statement of Hypothesis:

Adopting electronic portfolios for tenure and promotion will likely appeal to innovators and early adopters of technology on campus. Rogers' Technology Adoption Curve suggests that will be about 16% of the target population. We can also expect about 50% of the target population to be resistant to a new technology, by falling into the late majority adopters and laggards category. The remaining 34% will be cautious, falling into the early majority adopters category.

However, Rogers also describes how *Relative Advantage*, "the degree to which an innovation is perceived as being better than the idea it supersedes" (pg. 212) can affect the rate of adoption. He provides the following generalization: "The relative advantage of an innovation, as perceived by members of a social system, is positively related to its rate of adoption." (pg. 216). Therefore, given the many advantages e-portfolio offers, the target population at Buffalo State may be more supportive of this technology than the Technology Adoption Curve would suggest.

**Hypothesis $1_1$ :** The majority of faculty and academic administrators at Buffalo State will support adoption of e-Portfolios for promotion and tenure reviews.

**Hypothesis $1_0$ :** The majority of faculty and academic administrators at Buffalo State will not support the adoption of e-portfolios for promotion and tenure reviews.

**b. Sample Selection and description of participants**

The sample selection came from a selected population at SUNY Buffalo State, a college located in Buffalo, New York. Following institutional review board approval, the entire population of full-time faculty and administrators involved in promotion and tenure reviews at Buffalo State were selected. The sample was comprised of 357 recipients, including the president, provost, academic deans, 99 professors (one of which was a visiting professor); 192 Associate Professors (two of which were visiting associate professors); and 58 assistant professors (one of which was a research assistant professor).

**c. Data collection methods**

A web-based survey was designed using Qualtrics Survey Software. The survey began with demographic information and included a series of questions designed to gather data on technology use; attitudes towards electronic portfolios and their use for promotion and tenure reviews; and to develop an innovativeness profile of respondents. The questions went through several revisions after receiving feedback from several reviewers. The survey was tested on four people prior to launching.

On March 10, 2015, the web-based survey was sent to the target population using their official Buffalo State email addresses. The email included a brief introduction about the researcher and purpose of the study. Recipients were informed that their participation was completely voluntary and responses would be anonymous. The email message ended with a link

to access the survey (See Appendices A for the email invitation). The survey was closed on March 31, 2015.

**d. Data Analysis**

Survey data was transferred from Qualtrics Survey Software to IBM SPSS Statistics 22. The researcher deleted three incomplete responses and data that was unneeded, such as IP address. The total number of complete responses was 121. The researcher reverse coded the rating scale where needed and added a new variable for each grouping of questions to calculate the average for each response in the group of questions. A sample average was checked by hand calculation to verify it was correct.

## Chapter IV: Discussion

Of 357 survey invitations, 121 completed the survey representing a 34% return rate. Demographic analysis showed 50% of respondents were male and 50% were female. Approximately 29% were professors, 54% were associate professors, and 17% were assistant professors. Interestingly, this equates to a 34% response rate in each rank. 12% of respondents identified themselves as serving in an administrative capacity, 19% identified themselves as department chairs, and the remaining 68% identified themselves as faculty members.

### Demographics:

**Q1: Rank**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Professor | 34 | 28.1 | 28.6 | 28.6 |
| | Associate Professor | 65 | 53.7 | 54.6 | 83.2 |
| | Assistant Professor | 20 | 16.5 | 16.8 | 100.0 |
| | Total | 119 | 98.3 | 100.0 | |
| Missing | System | 2 | 1.7 | | |
| Total | | 121 | 100.0 | | |

**Q2: Do you serve in one of the following administrative or department chair capacities?**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes, Dean, VP or other | 15 | 12.4 | 12.5 | 12.5 |
| | Yes, Department Chair | 23 | 19.0 | 19.2 | 31.7 |
| | No | 82 | 67.8 | 68.3 | 100.0 |
| | Total | 120 | 99.2 | 100.0 | |
| Missing | System | 1 | .8 | | |
| Total | | 121 | 100.0 | | |

**Q3: Are you tenured?**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes | 96 | 79.3 | 80.7 | 80.7 |
| | No | 23 | 19.0 | 19.3 | 100.0 |
| | Total | 119 | 98.3 | 100.0 | |
| Missing | System | 2 | 1.7 | | |
| Total | | 121 | 100.0 | | |

**Q4: Age**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Under 35 years | 4 | 3.3 | 3.4 | 3.4 |
| | Between 35 and 49 years | 46 | 38.0 | 38.7 | 42.0 |
| | Between 50 and 64 years | 51 | 42.1 | 42.9 | 84.9 |
| | 65 years or more | 18 | 14.9 | 15.1 | 100.0 |
| | Total | 119 | 98.3 | 100.0 | |
| Missing | System | 2 | 1.7 | | |
| Total | | 121 | 100.0 | | |

**Q5: Gender**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Male | 59 | 48.8 | 50.0 | 50.0 |
| | Female | 59 | 48.8 | 50.0 | 100.0 |
| | Total | 118 | 97.5 | 100.0 | |
| Missing | System | 3 | 2.5 | | |
| Total | | 121 | 100.0 | | |

**Q6: Affiliation at Buffalo State**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | School of Arts and Humanities | 24 | 19.8 | 20.2 | 20.2 |
| | School of Education | 25 | 20.7 | 21.0 | 41.2 |
| | School of Natural and Social Sciences | 32 | 26.4 | 26.9 | 68.1 |
| | School of the Professions | 30 | 24.8 | 25.2 | 93.3 |
| | University College | 3 | 2.5 | 2.5 | 95.8 |
| | Administration/Other | 5 | 4.1 | 4.2 | 100.0 |
| | Total | 119 | 98.3 | 100.0 | |
| Missing | System | 2 | 1.7 | | |
| Total | | 121 | 100.0 | | |

The most significant question in the study was number 11. The resulting data provided the information required to either accept or reject the hypothesis statement, the purpose of doing this study.

| **Q11: Please rate your level of agreement or disagreement with the statement: I would support the adoption of electronic portfolios for P&T reviews at Buffalo State.** | | | | |
|---|---|---|---|---|
| **Strongly Agree 50.4%** | **Agree 27.3%** | **Neutral 13.2%** | **Slightly Disagree 6.6%** | **Strongly Disagree 2.5%** |

By categorizing respondents, we find the rate of support by administrators versus faculty.

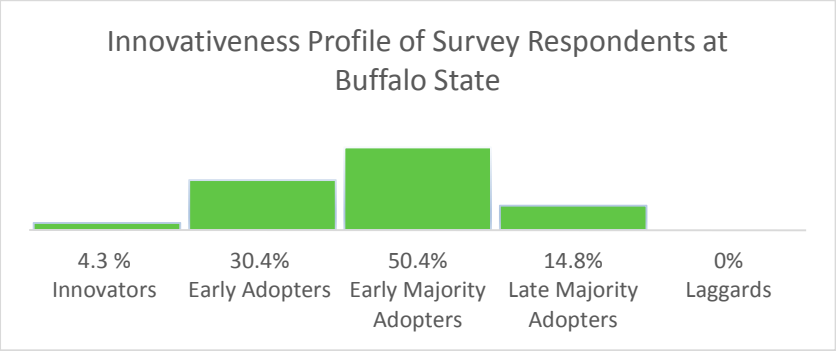
| Support for E-Portfolios for P&T by Position | | |
|---|---|---|
| **Administrators** | **Department Chairs** | **Faculty** |
| **93%** | **93%** | **75%** |

Additional frequency tables that break down responses by characteristics such as gender, age, school affiliation and tenure status can be found in Appendix B. Interestingly, the age group most opposed were those under 35 years old. Though there were only four respondents in this group, 50% of them slightly disagreed with the proposed adoption. As part of the millennial generation who have grown up on technology, the researcher would have expected them to be the most supportive.

Question 8 was designed to develop an innovativeness profile of respondents, the second purpose of the study. Using a 7 point Likert scale, respondents self-rated themselves on categories such as technology use, attitude towards technology and personal innovativeness traits. By computing an average for all items included in question 8 for each respondent, they were placed into categories based on Rogers' Adoption Curve. The researcher defined an average between 1 – 2.4 as a Laggard (1) , an average between 2.5 – 4 as a Late Majority Adopter (2) , an average between 4.1 – 5.5 as an Early Majority Adopter (3) , an average between 5.6 – 6.9 as an Early Adopter (4) , and a 7 as an Innovator (5). This approach provided the researcher with insight as to how receptive respondents may be to new technology. Shown in Figure 3 and Table 2, respondents to this survey from Buffalo State appear to be more innovative than might be expected based on Rogers' theory. There was not one respondent that self-identified with scores that placed them into the laggard category, and only 15% of respondents were placed in the late majority adopter category. The highest result was in the Early Majority Adopter Category at 50%, and over 34% were identified as either Early Adopters or Innovators

combined. If any items were not answered by a respondent, an average wasn't calculated and no label applied.

**Figure 3: Buffalo State Survey Respondents vs. Everett Rogers' Technology Adoption Curve**



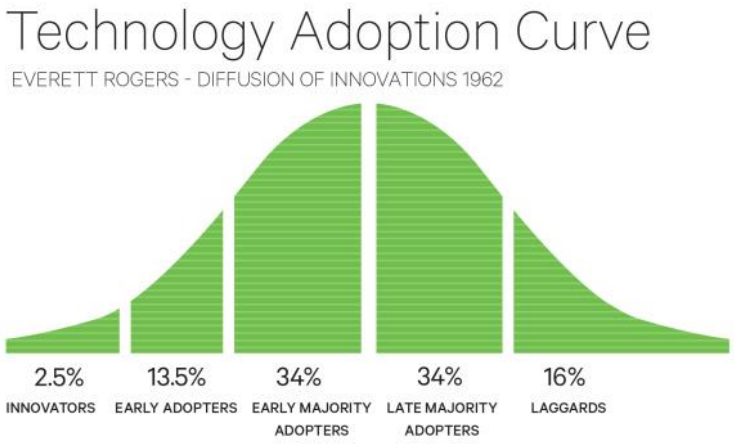




**Table 2: Innovativeness Profile Respondents at Buffalo State**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Innovators | 5 | 4.1 | 4.3 | 4.3 |
| | Early Adopters | 35 | 28.9 | 30.4 | 34.8 |
| | Early Majority Adopters | 58 | 47.9 | 50.4 | 85.2 |
| | Late Majority Adopters | 17 | 14.0 | 14.8 | 100.0 |
| | Total | 115 | 95.0 | 100.0 | |
| Missing | System | 6 | 5.0 | | |
| Total | | 121 | 100.0 | | |

## Chapter V: Summary, Implications, Future Research

### a. Implications of possible outcomes

Findings conclude both faculty and administration at Buffalo State are very supportive of electronic portfolios for personnel reviews. Question 12 was open ended and allowed respondents to provide comments regarding the study. The majority of comments were positive, and much enthusiasm was expressed. A sampling follows:

- "I have been waiting for this since I arrived at Buffalo State. We need to move into the 21st century…"
- "Many colleges are already using e-portfolios. We should readily adopt the technology and move academia forward."
- "Please press for electronic portfolios. It will make the whole process easier!"
- "It is a logical and inevitable step to use electronic portfolios."

However, survey results showed about 9% of respondents were either slightly or strongly opposed to electronic portfolio use. Privacy concerns, the amount of training time, and general wariness of the software and process were expressed. A sampling of comments follows:

- "Privacy is a major concern."
- "I would worry that nuance and details could be lost/overshadowed."
- "Reviews take a great deal of time. I worry that adoption of e-portfolios will add to that time demand."
- "Looking at a screen for so long can be tiresome."
- "Promotion and tenure materials are not one size fits all.

Several comments supported the optional use of electronic portfolios. This view is supported by the results of Question 12, which show that over 50% of respondents believe the use of electronic portfolios should be optional, not mandatory.

The findings also show that Buffalo State faculty and administrators are more innovative than the Rogers' Technology Adoption Curve would suggest. This is important because it extends the usefulness of this study's findings to how future initiatives may be accepted at Buffalo State.

Following the conclusion of the study, the researcher spoke to the president of the local chapter of United University Professions, the union representing faculty and professional staff at Buffalo State. Though he did not voice concern or objections regarding this research, he did express the importance of UUP involvement in any initiative to institute e-portfolios for personnel reviews at the campus.

**b. Limitations of Study**

There are limitations to the study. The response rate only represents about 34% of the faculty surveyed. This leaves a majority of faculty whose opinion is still unknown. It is possible that people least comfortable with technology use were most likely to decline participating. The innovativeness instrument and items were developed by the researcher. The categories are based on Rogers' research which the researcher applied to this newly developed tool.

**c. Future Research**

1. Expand audience by adding survey delivery options, such as paper. This would garner responses from those less comfortable with technology.

2. Additional statistical analysis of current data set would give more specificity in interpretation of results.
3. Further validation and reliability of instrument including adding or deleting items to provide a tool for other institutions to use in exploring perceptions on their campus.
4. Longitudinal follow-up with campus initiatives or future implementation which could provide a model for exploration, adoption and implementation of e-portfolios for tenure and promotion.
5. Expand study to other institutions which would provide comparisons and insights via benchmarking against peer institutions.

**Conclusion:**

Survey results indicate Buffalo State faculty and academic administrators overwhelmingly support adoption of an electronic method for promotion and tenure reviews. Therefore, steps should be taken to initiate campus dialogue regarding implementation, policies and usage. With support and direction provided by college administration, a campus-wide committee should be convened to explore possibilities for e-portfolio use at Buffalo State.

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Appendix A

*Survey Instrument*

Introductory message sent by e-mail with survey link:

My name is Carolyn Martino, and I am a graduate student at SUNY Buffalo State. Some of you may also know me in my capacity as Assistant to the Provost. In my work, I have become aware that electronic portfolios for promotion and tenure are being increasingly utilized in the academy. Therefore, I was interested in focusing my Master's Project research on perceptions on our campus towards electronic portfolios for this purpose.

This survey is being conducted to fulfill requirements towards my Master's Project in Public Administration and is not part of any current initiative at Buffalo State. Questions regarding this survey can be directed to Carolyn Martino at 716-878-5903 or martinc@buffalostate.edu.

Data will be collected through an electronic, web-based survey using Qualtrics. Participation in the survey is completely voluntary, your identity will be anonymous, and you can withdraw at any time. A link to the survey can be found below and will take you approximately 5-10 minutes to complete.

If you are unable to contact the researcher and have concerns or complaints about the research study or questions about your rights as a research subject, please email Gina Game, IRB Administrator, at gameg@buffalostate.edu.

Thank you for your time and participation.

SURVEY LINK

*SURVEY: Electronic Portfolios for Promotion and Tenure Reviews*

Q1 Rank
- ❍ Professor
- ❍ Associate Professor
- ❍ Assistant Professor

Q2 Do you serve in one of the following administrative or department chair capacities?
- ❍ Yes, Department Chair
- ❍ Yes, Dean, VP or other
- ❍ No

Q3 Are you tenured?
- ❍ Yes
- ❍ No

Q4 Age
- ❍ Under 35 years
- ❍ Between 35 and 49 years
- ❍ Between 50 and 64 years
- ❍ 65 years or more

Q5 Gender
- ❍ Male
- ❍ Female

Q6 Affiliation at Buffalo State
- ❍ School of Arts and Humanities
- ❍ School of Education
- ❍ School of Natural and Social Sciences
- ❍ School of the Professions
- ❍ University College
- ❍ Administration/Other

Q7 Please self-report which rating on the scale best represents your experience with the technology tools listed below.

| | Non-user (1) | Basic (2) | Intermediate (3) | Advanced (4) |
|---|---|---|---|---|
| Blackboard (Learning Management System) | ❍ | ❍ | ❍ | ❍ |
| DegreeWorks (Student Audit System) | ❍ | ❍ | ❍ | ❍ |
| TaskStream (Assessment Program) | ❍ | ❍ | ❍ | ❍ |
| Buffalo State's online employment/recruitment system, PeopleAdmin. | ❍ | ❍ | ❍ | ❍ |
| Online Surveys such as Qualtrics or other. | ❍ | ❍ | ❍ | ❍ |
| Online teaching | ❍ | ❍ | ❍ | ❍ |
| TeachLive (mixed-reality classroom) | ❍ | ❍ | ❍ | ❍ |
| Video/Web conferencing such as Skype | ❍ | ❍ | ❍ | ❍ |
| Smartphone | ❍ | ❍ | ❍ | ❍ |
| Accessing Email from smartphone | ❍ | ❍ | ❍ | ❍ |
| Tablet (Ipad or similar) | ❍ | ❍ | ❍ | ❍ |
| Social Networks (Facebook or other) | ❍ | ❍ | ❍ | ❍ |
| Twitter | ❍ | ❍ | ❍ | ❍ |
| Instagram | ❍ | ❍ | ❍ | ❍ |

Q8 In general, please self-report which rating on the scale best represents you.

| | Very High (7) | High (6) | Somewhat High (5) | Average (4) | Somewhat Low (3) | Low (2) | Very Low (1) |
|---|---|---|---|---|---|---|---|
| Your interest in new technology products. | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Your comfort embracing new technologies. | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Your daily usage of technology tools for work-related tasks. | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Your daily usage of technology tools for personal use. | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Your desire to be a leader among your peers in new technology tools. | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Your tendency to wait until a new technology product is widely used and proven before you will use or purchase it. | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The likelihood people would describe you as a traditionalist. | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The likelihood people would describe you as an opinion leader. | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The likelihood people would describe you as venturesome or a risk taker. | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

Q9 An electronic portfolio (also known as an e-portfolio, e-portfolio, digital portfolio, or online portfolio) is a collection of electronic evidence assembled and managed by a user, usually on the Web. Such electronic evidence may include inputted text, electronic files, images, multimedia, blog entries, and hyperlinks. E-portfolios are both demonstrations of the user's abilities and platforms for self-expression, and, if they are online, they can be maintained dynamically over time (Wikipedia).Please self-report which rating on the scale best represents your experience with P&T (Promotion/Tenure/Renewal of Term) and electronic portfolios.

| | Very High (7) | High (6) | Somewhat High (5) | Average (4) | Somewhat Low (3) | Low (2) | Very Low (1) |
|---|---|---|---|---|---|---|---|
| Your experience assembling an electronic portfolio for P&T review. | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Your comfort using the current paper process for P&T reviews. | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Your knowledge or use of electronic portfolios. | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Your interest in using electronic portfolios for P&T reviews. | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

Q10 Please rate your level of agreement or disagreement with the statements below pertaining to electronic portfolios.

| | Strongly Agree (5) | Slightly Agree (4) | Neutral (3) | Slightly Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|
| Electronic Portfolios are more easily updated and modified than paper portfolios. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Electronic Portfolios are more easily accessed and shared than paper portfolios. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Electronic Portfolios allow users to create more dynamic presentations than paper portfolios. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Electronic Portfolios would create efficiency in the P&T process. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Electronic Portfolios create more privacy concerns than traditional paper P&T portfolios. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Learning how to use electronic portfolio software will be time consuming and cumbersome for me. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Use of electronic portfolios for P&T should be optional, not mandatory. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Given the choice, I would prefer to create an electronic portfolio for P&T review, rather than a paper copy. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Given the choice, I would prefer to review a colleague's P&T file electronically from my computer rather than a paper copy located on campus. | ❍ | ❍ | ❍ | ❍ | ❍ |
| If offered, I would take advantage of training in the use of electronic portfolios for P&T reviews. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Electronic methods for faculty reviews will be widely used in higher education within the next decade. | ❍ | ❍ | ❍ | ❍ | ❍ |

Q11 Please rate your level of agreement or disagreement with the statement below.

| | Strongly Agree (5) | Slightly Agree (4) | Neutral (3) | Slightly Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|
| I would support the adoption of electronic portfolios for P&T reviews at Buffalo State. | ❍ | ❍ | ❍ | ❍ | ❍ |

Q12 Please provide comments, concerns, or ideas that will help investigate and inform this study. Responses may be shared in final results but will not be accompanied by any personal identifiers.

Appendix B.

*Frequency Tables*

**Demographics:**

**Q1: Rank**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Professor | 34 | 28.1 | 28.6 | 28.6 |
| | Associate Professor | 65 | 53.7 | 54.6 | 83.2 |
| | Assistant Professor | 20 | 16.5 | 16.8 | 100.0 |
| | Total | 119 | 98.3 | 100.0 | |
| Missing | System | 2 | 1.7 | | |
| Total | | 121 | 100.0 | | |

**Q2: Do you serve in one of the following administrative or department chair capacities?**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes, Dean, VP or other | 15 | 12.4 | 12.5 | 12.5 |
| | Yes, Department Chair | 23 | 19.0 | 19.2 | 31.7 |
| | No | 82 | 67.8 | 68.3 | 100.0 |
| | Total | 120 | 99.2 | 100.0 | |
| Missing | System | 1 | .8 | | |
| Total | | 121 | 100.0 | | |

**Q3: Are you tenured?**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes | 96 | 79.3 | 80.7 | 80.7 |
| | No | 23 | 19.0 | 19.3 | 100.0 |
| | Total | 119 | 98.3 | 100.0 | |
| Missing | System | 2 | 1.7 | | |
| Total | | 121 | 100.0 | | |

**Q4: Age**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Under 35 years | 4 | 3.3 | 3.4 | 3.4 |
| | Between 35 and 49 years | 46 | 38.0 | 38.7 | 42.0 |
| | Between 50 and 64 years | 51 | 42.1 | 42.9 | 84.9 |
| | 65 years or more | 18 | 14.9 | 15.1 | 100.0 |
| | Total | 119 | 98.3 | 100.0 | |
| Missing | System | 2 | 1.7 | | |
| Total | | 121 | 100.0 | | |

**Q5: Gender**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Male | 59 | 48.8 | 50.0 | 50.0 |
| | Female | 59 | 48.8 | 50.0 | 100.0 |
| | Total | 118 | 97.5 | 100.0 | |
| Missing | System | 3 | 2.5 | | |
| Total | | 121 | 100.0 | | |

**Q6: Affiliation at Buffalo State**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | School of Arts and Humanities | 24 | 19.8 | 20.2 | 20.2 |
| | School of Education | 25 | 20.7 | 21.0 | 41.2 |
| | School of Natural and Social Sciences | 32 | 26.4 | 26.9 | 68.1 |
| | School of the Professions | 30 | 24.8 | 25.2 | 93.3 |
| | University College | 3 | 2.5 | 2.5 | 95.8 |
| | Administration/Other | 5 | 4.1 | 4.2 | 100.0 |
| | Total | 119 | 98.3 | 100.0 | |
| Missing | System | 2 | 1.7 | | |
| Total | | 121 | 100.0 | | |

## Q11: ALL RESPONDENTS:

**Please rate your level of agreement or disagreement with the statement below.-I would support the adoption of electronic portfolios for P&T reviews at Buffalo State.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 3 | 2.5 | 2.5 | 2.5 |
| | Slightly Disagree | 8 | 6.6 | 6.6 | 9.1 |
| | Neutral | 16 | 13.2 | 13.2 | 22.3 |
| | Slightly Agree | 33 | 27.3 | 27.3 | 49.6 |
| | Strongly Agree | 61 | 50.4 | 50.4 | 100.0 |
| | Total | 121 | 100.0 | 100.0 | |

## Q11: ADMINISTRATOR RESPONSES:

**Please rate your level of agreement or disagreement with the statement below.-I would support the adoption of electronic portfolios for P&T reviews at Buffalo State.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Slightly Disagree | 1 | 6.7 | 6.7 | 6.7 |
| | Slightly Agree | 5 | 33.3 | 33.3 | 40.0 |
| | Strongly Agree | 9 | 60.0 | 60.0 | 100.0 |
| | Total | 15 | 100.0 | 100.0 | |

## Q11: FACULTY RESPONSES:

**Please rate your level of agreement or disagreement with the statement below.-I would support the adoption of electronic portfolios for P&T reviews at Buffalo State.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 2.4 | 2.4 | 2.4 |
| | Slightly Disagree | 7 | 8.5 | 8.5 | 11.0 |
| | Neutral | 13 | 15.9 | 15.9 | 26.8 |
| | Slightly Agree | 22 | 26.8 | 26.8 | 53.7 |
| | Strongly Agree | 38 | 46.3 | 46.3 | 100.0 |
| | Total | 82 | 100.0 | 100.0 | |

## Q11: DEPARTMENT CHAIR RESPONSES:

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Slightly Disagree | 1 | 6.7 | 6.7 | 6.7 |
| | Slightly Agree | 5 | 33.3 | 33.3 | 40.0 |
| | Strongly Agree | 9 | 60.0 | 60.0 | 100.0 |
| | Total | 15 | 100.0 | 100.0 | |

## Q11: TENURED FACULTY RESPONSES

**Please rate your level of agreement or disagreement with the statement below.-I would support the adoption of electronic portfolios for P&T reviews at Buffalo State.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 3 | 3.1 | 3.1 | 3.1 |
| | Slightly Disagree | 6 | 6.3 | 6.3 | 9.4 |
| | Neutral | 14 | 14.6 | 14.6 | 24.0 |
| | Slightly Agree | 23 | 24.0 | 24.0 | 47.9 |
| | Strongly Agree | 50 | 52.1 | 52.1 | 100.0 |
| | Total | 96 | 100.0 | 100.0 | |

## Q11: UNTENURED FACULTY RESPONSES

**Please rate your level of agreement or disagreement with the statement below.-I would support the adoption of electronic portfolios for P&T reviews at Buffalo State.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Slightly Disagree | 2 | 8.7 | 8.7 | 8.7 |
| | Neutral | 1 | 4.3 | 4.3 | 13.0 |
| | Slightly Agree | 9 | 39.1 | 39.1 | 52.2 |
| | Strongly Agree | 11 | 47.8 | 47.8 | 100.0 |
| | Total | 23 | 100.0 | 100.0 | |

## Q11: RESPONSE BY GENDER – MALE:

**Please rate your level of agreement or disagreement with the statement below.-I would support the adoption of electronic portfolios for P&T reviews at Buffalo State.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 3 | 5.1 | 5.1 | 5.1 |
| | Slightly Disagree | 3 | 5.1 | 5.1 | 10.2 |
| | Neutral | 8 | 13.6 | 13.6 | 23.7 |
| | Slightly Agree | 15 | 25.4 | 25.4 | 49.2 |
| | Strongly Agree | 30 | 50.8 | 50.8 | 100.0 |
| | Total | 59 | 100.0 | 100.0 | |

## Q11: RESPONSE BY GENDER - FEMALE:

**Please rate your level of agreement or disagreement with the statement below.-I would support the adoption of electronic portfolios for P&T reviews at Buffalo State.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Slightly Disagree | 5 | 8.5 | 8.5 | 8.5 |
| | Neutral | 7 | 11.9 | 11.9 | 20.3 |
| | Slightly Agree | 17 | 28.8 | 28.8 | 49.2 |
| | Strongly Agree | 30 | 50.8 | 50.8 | 100.0 |
| | Total | 59 | 100.0 | 100.0 | |

## Q11: RESPONSE BY SCHOOL AFFILIATION

**Affiliation at Buffalo State * Please rate your level of agreement or disagreement with the statement below.-I would support the adoption of electronic portfolios for P&T reviews at Buffalo State. Crosstabulation**

| | | | Please rate your level of agreement or disagreement with the statement below.-I would support the adoption of electronic portfolios for P&T reviews at Buffalo State. | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Strongly Disagree | Slightly Disagree | Neutral | Slightly Agree | Strongly Agree | Total |
| Affiliation at Buffalo State | School of Arts and Humanities | Count | 0 | 1 | 5 | 4 | 14 | 24 |
| | | % of Total | 0.0% | 0.8% | 4.2% | 3.4% | 11.8% | 20.2% |
| | School of Education | Count | 0 | 1 | 3 | 9 | 12 | 25 |
| | | % of Total | 0.0% | 0.8% | 2.5% | 7.6% | 10.1% | 21.0% |
| | School of Natural and Social Sciences | Count | 2 | 4 | 4 | 9 | 13 | 32 |
| | | % of Total | 1.7% | 3.4% | 3.4% | 7.6% | 10.9% | 26.9% |
| | School of the Professions | Count | 1 | 1 | 3 | 9 | 16 | 30 |
| | | % of Total | 0.8% | 0.8% | 2.5% | 7.6% | 13.4% | 25.2% |
| | University College | Count | 0 | 1 | 0 | 0 | 2 | 3 |
| | | % of Total | 0.0% | 0.8% | 0.0% | 0.0% | 1.7% | 2.5% |
| | Administration/Other | Count | 0 | 0 | 0 | 1 | 4 | 5 |
| | | % of Total | 0.0% | 0.0% | 0.0% | 0.8% | 3.4% | 4.2% |
| Total | | Count | 3 | 8 | 15 | 32 | 61 | 119 |
| | | % of Total | 2.5% | 6.7% | 12.6% | 26.9% | 51.3% | 100.0% |

## Q11: School of Arts and Humanities:

**Please rate your level of agreement or disagreement with the statement below.-I would support the adoption of electronic portfolios for P&T reviews at Buffalo State.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Slightly Disagree | 1 | 4.2 | 4.2 | 4.2 |
| | Neutral | 5 | 20.8 | 20.8 | 25.0 |
| | Slightly Agree | 4 | 16.7 | 16.7 | 41.7 |
| | Strongly Agree | 14 | 58.3 | 58.3 | 100.0 |
| | Total | 24 | 100.0 | 100.0 | |

## Q11: School of Education:

**Please rate your level of agreement or disagreement with the statement below.-I would support the adoption of electronic portfolios for P&T reviews at Buffalo State.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Slightly Disagree | 1 | 4.0 | 4.0 | 4.0 |
| | Neutral | 3 | 12.0 | 12.0 | 16.0 |
| | Slightly Agree | 9 | 36.0 | 36.0 | 52.0 |
| | Strongly Agree | 12 | 48.0 | 48.0 | 100.0 |
| | Total | 25 | 100.0 | 100.0 | |

## Q11: School of the Professions:

**Please rate your level of agreement or disagreement with the statement below.-I would support the adoption of electronic portfolios for P&T reviews at Buffalo State.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 1 | 3.3 | 3.3 | 3.3 |
| | Slightly Disagree | 1 | 3.3 | 3.3 | 6.7 |
| | Neutral | 3 | 10.0 | 10.0 | 16.7 |
| | Slightly Agree | 9 | 30.0 | 30.0 | 46.7 |
| | Strongly Agree | 16 | 53.3 | 53.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

## Q11: BY AGE - UNDER 35 YEARS OLD:

Please rate your level of agreement or disagreement with the statement below.-I would support the adoption of electronic portfolios for P&T reviews at Buffalo State.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Slightly Disagree | 2 | 50.0 | 50.0 | 50.0 |
| | Slightly Agree | 1 | 25.0 | 25.0 | 75.0 |
| | Strongly Agree | 1 | 25.0 | 25.0 | 100.0 |
| | Total | 4 | 100.0 | 100.0 | |

## Q11: BY AGE - BETWEEN 35 AND 49 YEARS OLD

Please rate your level of agreement or disagreement with the statement below.-I would support the adoption of electronic portfolios for P&T reviews at Buffalo State.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Slightly Disagree | 2 | 4.3 | 4.3 | 4.3 |
| | Neutral | 4 | 8.7 | 8.7 | 13.0 |
| | Slightly Agree | 12 | 26.1 | 26.1 | 39.1 |
| | Strongly Agree | 28 | 60.9 | 60.9 | 100.0 |
| | Total | 46 | 100.0 | 100.0 | |

## Q11: BY AGE - BETWEEN 50 AND 64 YEARS OLD

Please rate your level of agreement or disagreement with the statement below.-I would support the adoption of electronic portfolios for P&T reviews at Buffalo State.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 3.9 | 3.9 | 3.9 |
| | Slightly Disagree | 4 | 7.8 | 7.8 | 11.8 |
| | Neutral | 8 | 15.7 | 15.7 | 27.5 |
| | Slightly Agree | 16 | 31.4 | 31.4 | 58.8 |
| | Strongly Agree | 21 | 41.2 | 41.2 | 100.0 |
| | Total | 51 | 100.0 | 100.0 | |

## Q11: BY AGE - 65 YEARS OR OLDER

Please rate your level of agreement or disagreement with the statement below.-I would support the adoption of electronic portfolios for P&T reviews at Buffalo State.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 1 | 5.6 | 5.6 | 5.6 |
| | Neutral | 4 | 22.2 | 22.2 | 27.8 |
| | Slightly Agree | 3 | 16.7 | 16.7 | 44.4 |
| | Strongly Agree | 10 | 55.6 | 55.6 | 100.0 |
| | Total | 18 | 100.0 | 100.0 | |

## Q10: Please rate your level of agreement or disagreement with the statement:

Use of electronic portfolios for P&T should be optional, not mandatory.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 18 | 14.9 | 14.9 | 14.9 |
| | Slightly Disagree | 19 | 15.7 | 15.7 | 30.6 |
| | Neutral | 20 | 16.5 | 16.5 | 47.1 |
| | Slightly Agree | 29 | 24.0 | 24.0 | 71.1 |
| | Strongly Agree | 35 | 28.9 | 28.9 | 100.0 |
| | Total | 121 | 100.0 | 100.0 | |

## Innovativeness profile - Tool developed by Researcher:

**Innovativeness Profile of Buffalo State Respondents**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Late Majority Adopters | 19 | 15.7 | 16.5 | 16.5 |
| | Early Majority Adopters | 63 | 52.1 | 54.8 | 71.3 |
| | Early Adopters | 28 | 23.1 | 24.3 | 95.7 |
| | Innovators | 5 | 4.1 | 4.3 | 100.0 |
| | Total | 115 | 95.0 | 100.0 | |
| Missing | System | 6 | 5.0 | | |
| Total | | 121 | 100.0 | | |

## Comments by Late Majority Adopters:

**Please provide comments, concerns, or ideas that will help investigate and inform this study. Res...**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | | 15 | 78.9 | 78.9 | 78.9 |
| | I like the idea of having this as an option, rather than a requirement. | 1 | 5.3 | 5.3 | 84.2 |
| | I think this is a great idea, but I worry about the time it would take for someone to learn how to do this. Also, if it is required, will there be convenient locations (or help) to scan documents that are not already in an e-file. | 1 | 5.3 | 5.3 | 89.5 |
| | It would be nice to access personnel information from home, but sometimes with that much documentation, looking at a screen for so long can be tiresome. | 1 | 5.3 | 5.3 | 94.7 |
| | Right now we use (Xerox) copiers for the student comments portion of the portfolio. We would certainly need scanners if we were to go to an all electronics version, which we don't have currently. So if our hardware can be updated, that would be lovely andit better be feeder scanners. Also, I do worry about the privacy piece and security. This business of the graduate office accepting recommendations via buff state e-mail concerns me. I would hope that we would not do the same thing. | 1 | 5.3 | 5.3 | 100.0 |
| | Total | 19 | 100.0 | 100.0 | |

## Comments by Innovators:

**Please provide comments, concerns, or ideas that will help investigate and inform this study. Res...**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | | 3 | 60.0 | 60.0 | 60.0 |
| | Programs in the arts deal with digitized copies of their work constantly. This would make assembling an P/T file much easier. -also- With the onset of such sights as Linked-in and the trend towards conferencing interviews, industries have required the orkfore to digitize there bios, resumes and CV's | 1 | 20.0 | 20.0 | 80.0 |
| | This survey is timely and prudent. Outcomes have the potential to impact recruitment, retention, and influence SUNY Buffalo State's status as a front runner in web functionality. | 1 | 20.0 | 20.0 | 100.0 |
| | Total | 5 | 100.0 | 100.0 | |

# Appendix C:

Survey Comments:

- This is a great topic to study and I look forward to reading the results....electronically
- The use of e-portfolios is common across many business and industries. Higher education should be leaders and innovators preparing our students for the world of work and play they will live. We are behind the times with technology at Buffalo State. Dissertations are submitted electronically as are manuscripts and other professional writings.
- I find the idea of electronic portfolios environmentally friendly and more author- friendly than traditional hard copy versions. I think it might take people a while to adjust to a new method of creating portfolios. My concern would be that the person reviewing the electronic portfolio may not be well-versed in the process or might miss important information due to lack of experience with the technology. For a candidate, this could have serious implications.
- Many colleges are already using e portfolios. We should readily adopt the technology and move academia forward. When you compare academia with industry practices, academia is archaic.
- This study seems to be asking for responses that it wants. If one explains one's interest in something, and then asks what another thinks of it, then one is actually asking if the person agrees. It is not a neutral stance. With that said, if those seeking tenure still need to collect and supply all these pieces of paper with signatures, then having them on a site would be much better. The process needs to be significantly less cumbersome than Blackboard, Taskstream, or the others.
- I would love to learn the software to make electronic reviews possible.
- A colleague decided to submit an electronic portfolio and did a very poor job with it. It was poorly organized and several critical elements were missing. It was difficult to determine what was missing because of the poor organization. We need standards for format and content if electronic portfolios are going to be used.
- It depends... if the portfolios require stuffing everything into templates they may be more of a nuisance than a help. Also, the variety of documentation could be challenging. And keep in mind that many portfolios submitted for personnel action on this campus are really a disorganized mess with missing documents. Not sure that an electronic version would be any improvement unless the administration actually insists on quality, complete, well organized dossiers in any format.
- This is necessary step in the evolution of higher education. I am worried about the infrastructure being able to carry it out. Our computing services is inept at best.
- I am enthusiastic about the idea of electronic portfolios and would be interested in creating one for myself. However, widespread implementation of an e-portfolio as a requirement for faculty will certainly meet with resistance from some faculty members, who are less adept at technology. Some additional access to scanning technology might be necessary. Some of my file B would require scanning, since it takes the form of printed programs. Even with widely available training, I notice that some of my colleagues do not use Blackboard, and I think there would be the same problem with an e-portfolio. But it's obviously the way things will go in the future. It is just a matter of when it is implemented.
- Please press for electronic portfolios. It will make the whole process easier!

- I prefer reading from paper materials, but this makes a great deal of sense, especially because P&T portfolios are becoming overly large.
- Privacy is a major concern.
- It would be nice to access personnel information from home, but sometimes with that much documentation, looking at a screen for so long can be tiresome.
- I like the idea of having this as an option, rather than a requirement.
- I would not be interested in creating a EP if Buffalo State told me what software I had to use. We use Blackboard for CMS - and I feel they are used for those people who cannot create courses online with other tools. I do not want to use a Buffalo State PURCHASED tool for my EP.
- Right now we use (Xerox) copiers for the student comments portion of the portfolio. We would certainly need scanners if we were to go to an all electronics version, which we don't have currently. So if our hardware can be updated, that would be lovely and it better be feeder scanners. Also, I do worry about the privacy piece and security. This business of the graduate office accepting recommendations via buff state e-mail concerns me. I would hope that we would not do the same thing.
- Manually assembling tenure dossiers (File A & B) take so much time compared to writing a personal statement and vitae. Since I electronically save all my documents relevant to future promotion, it would be great to adopt an electronic method here as well.
- I think using the electronic portfolios is a good option. But older faculty like a hard copy for the final view. But in time this too will pass away. It is the same issue with a Kindel or Nook. Sometimes you want a hard copy book but other times it is very convenient to have an electronic copy, especially, when traveling.
- I think this is a great idea, but I worry about the time it would take for someone to learn how to do this. Also, if it is required, will there be convenient locations (or help) to scan documents that are not already in an e-file.
- Too easy for an electronic format to boil items down into numbers---I would worry that nuance and details could be lost/overshadowed
- Prior to the adoption of electronic portfolios, faculty should be provided with tools or software that makes the transformation of paper files to electronic files easily. For example, Adobe Professional should be the standard software installed in faculty's computers. This is just one of the examples.
- The digital age is here. It is a logical and inevitable step to use electronic portfolios. Sadly, I know some of my colleagues are Luddites and resist the digital age
- This should be instituted - we are far behind other institutions in adopting this strategy - it is quite ridiculous that employees need to spend countless hours, printing, copying and assembling an enormous binder with attending DVDs that travels across campus to various departments. Not only this, for their protection against loss, they need to keep an entire duplicate copy.
- Programs in the arts deal with digitized copies of their work constantly. This would make assembling an P/T file much easier. -also- With the onset of such sights as Linked-in and the trend towards conferencing interviews, industries have required the workforce to digitize there bios, resumes and CV's
- We need to move e-portfolios forward in student work across all departments.

- This survey is timely and prudent. Outcomes have the potential to impact recruitment, retention, and influence SUNY Buffalo State's status as a front runner in web functionality.
- I think an optional adoption would be a good idea initially. I would like to see links from listings of required items (articles, student evaluations, service) to the actual documentation of those items. That would really make the system more efficient!
- I have been waiting for this since I arrived at Buffalo State. We need to move into the 21st century, and I only wish this had happened before I finished the tenure process.
- These kinds of things are too important for faculty to be passed around by electronic form. There is really a big difference in comprehension with online materials as studies show and it is harder for everyone to keep track of what is going on when you have many of these types of programs on campus. Also, the electronic form makes it way too easy to pass private information around. If this happens, you just creating a nightmare for faculty as the number of software programs increase or decrease or change or are updated. Just look at the time and attendance for faculty. How is that working out.
- I created the first electronic review of a promotion's folder in the SOE. This was successful, easy to use, and easy to navigate. I simply created a Word document (later converted to PDF) that contained links to various documents.
- It is crazy that we don't already have this option and this technology more widely implemented on our campus.
- We need consistency, so I would very much oppose optional electronic submission. I'm also wary of moving to such a format without any indication of how the portal would look because P&T files are not one size fits all.
- I've had problems with online job applications that include required fields that do not apply to my case and/or which had no obvious location to upload materials that were absolutely relevant but which had not been anticipated by whoever wrote the code for the application. How would electronic files be set up? Would there be electronic tabs to subdivide the various elements? Who decides what those tabs would be?
- I find the paper portfolios to be burdensome - they are difficult to keep updated, the printed copies are costly, they cannot easily be modified or repurposed to other uses. We should be investing in a robust electronic portfolio system.
- I submitted my tenure and promotion package as an electronic portfolio in 2007...everyone loved it!
- There are advantages and disadvantages to electronic portfolios. I do not think that 100% of our faculty should be required to use them until and unless the faculty become familiar and comfortable with them. Our experience with Taskstream is perfect data to indicate how difficult it can be to train faculty and enforce use of an electronic assessment system, let alone a portfolio.
- I have chaired our Personnel Committee -- reviews take a great deal of time. I worry that the adoption of e-portfolios may add to that time demand.
- These are interesting questions and I believe that technology will certainly be incorporated into the P&T process as time goes by. As people become more technically savvy, I believe that this process will evolve to include electronic media as part of the adjudication of faculty and staff in higher education.
- Electronic portfolios would be very effective for File A. File B must remain paper.

- The advantages of electronic portfolios far outweighs the disadvantages. Given the trends, they certainly will be in wide use in the near future. To move in this direction we need training and perhaps the adoption of a system that is used all across Buffalo State (maybe even SUNY).
- While we trust all those who would view an electronic portfolio will maintain the confidentiality of the materials submitted by a candidate, there needs to be a policy to ensure the information is not downloaded and shared with others that are not part of the P&T process.
- I would hope that the E-portfolio software to be selected would be user friendly, i.e., highly intuitive in a way that a user manual would not be needed. We should be able to follow directions on screen to move us through the software.
- Let's move into the 21st Century.
- The current cohort of faculty has not evolved using electronic tools and applications although many will reluctantly adopt them to facilitate teaching, service and scholarship. It is likely that as future generations replace retirees over time, they will feel a greater sense of comfort and value in embracing technology tools personally and professionally.