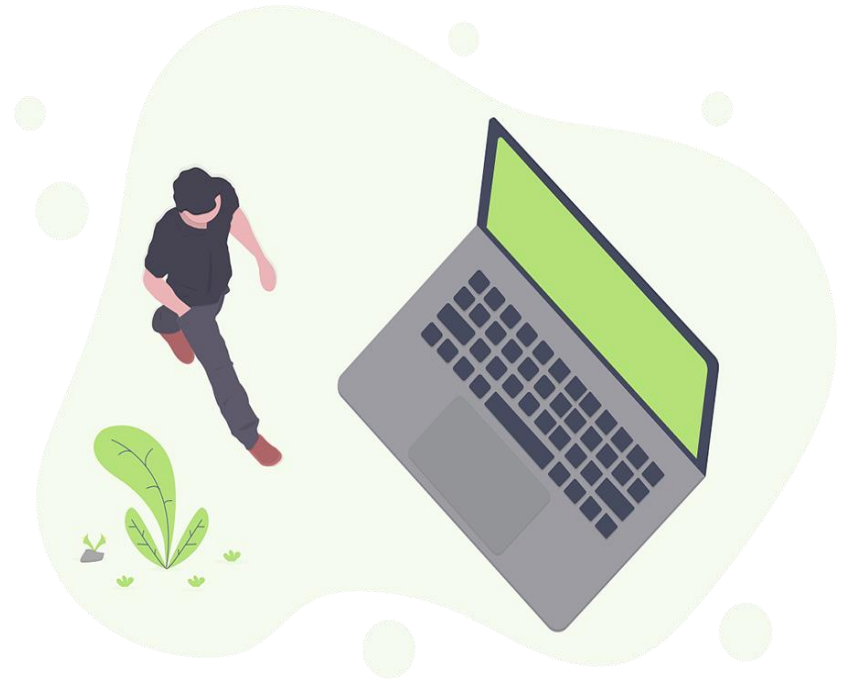
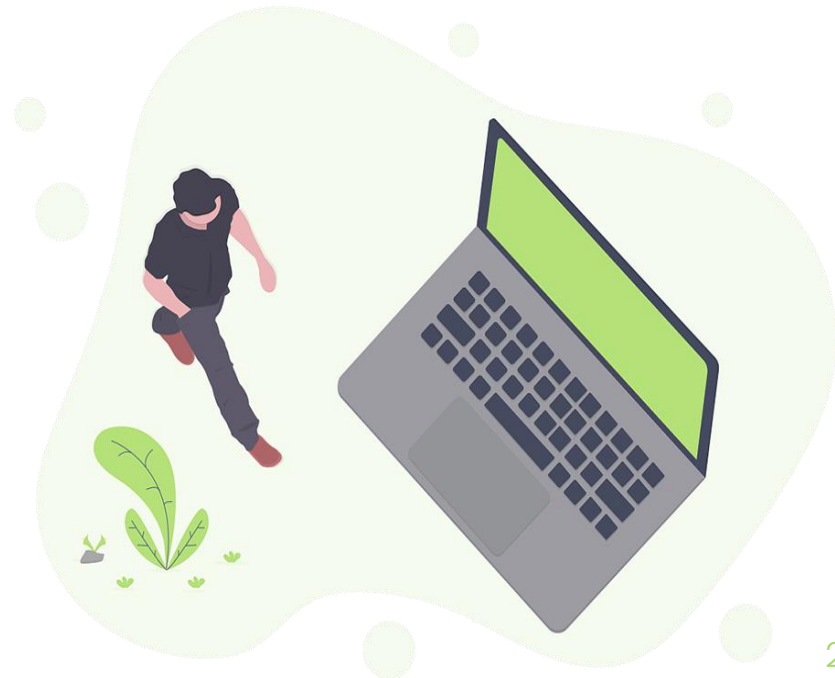
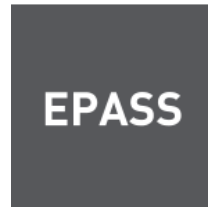


ePortfolios for lab testing



Analyzed ePortfolios



1. Focus

Of the ePortfolios



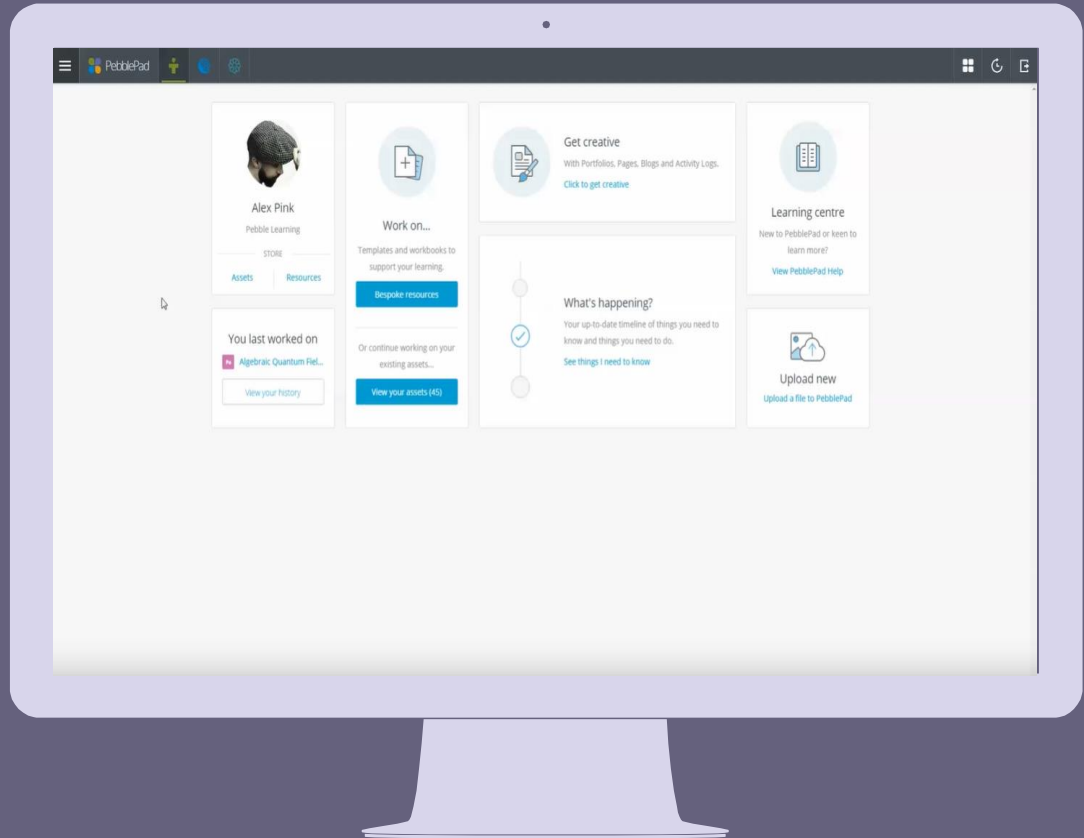
Focus

- Personal learning (Pebble+)
- Assessment (ATLAS)
- Personal mentoring (Flourish)



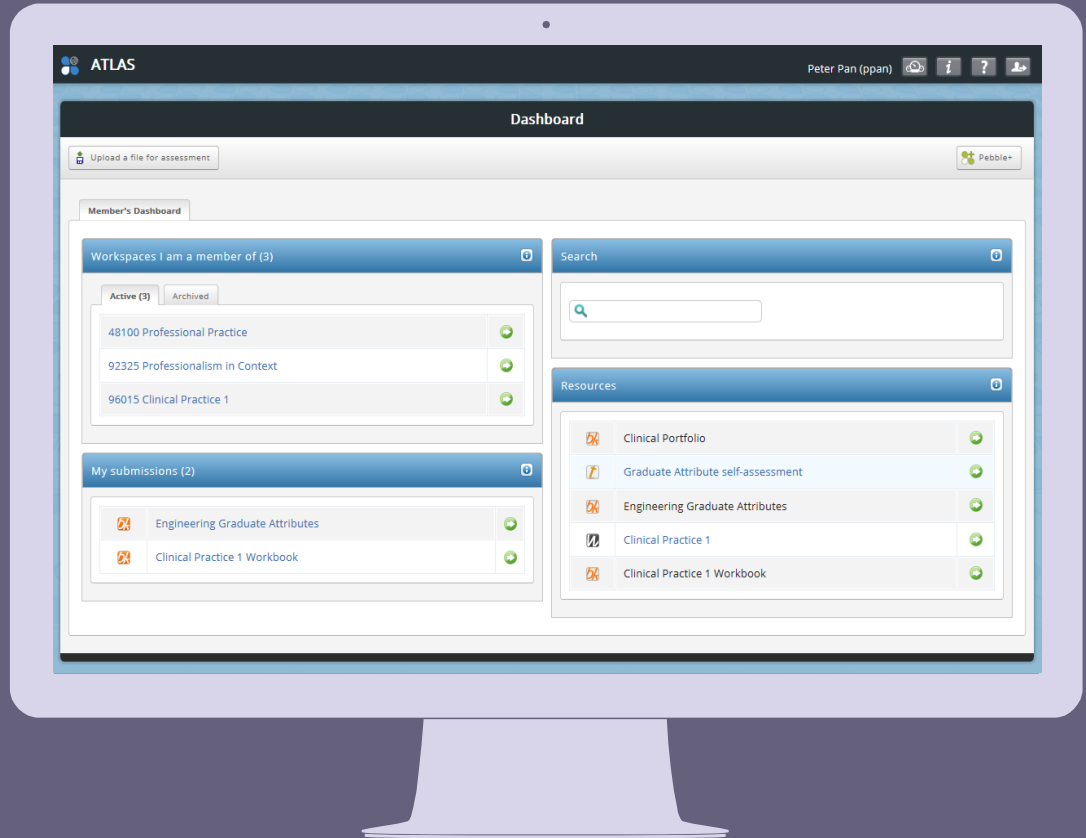
Pebble+

PebblePad



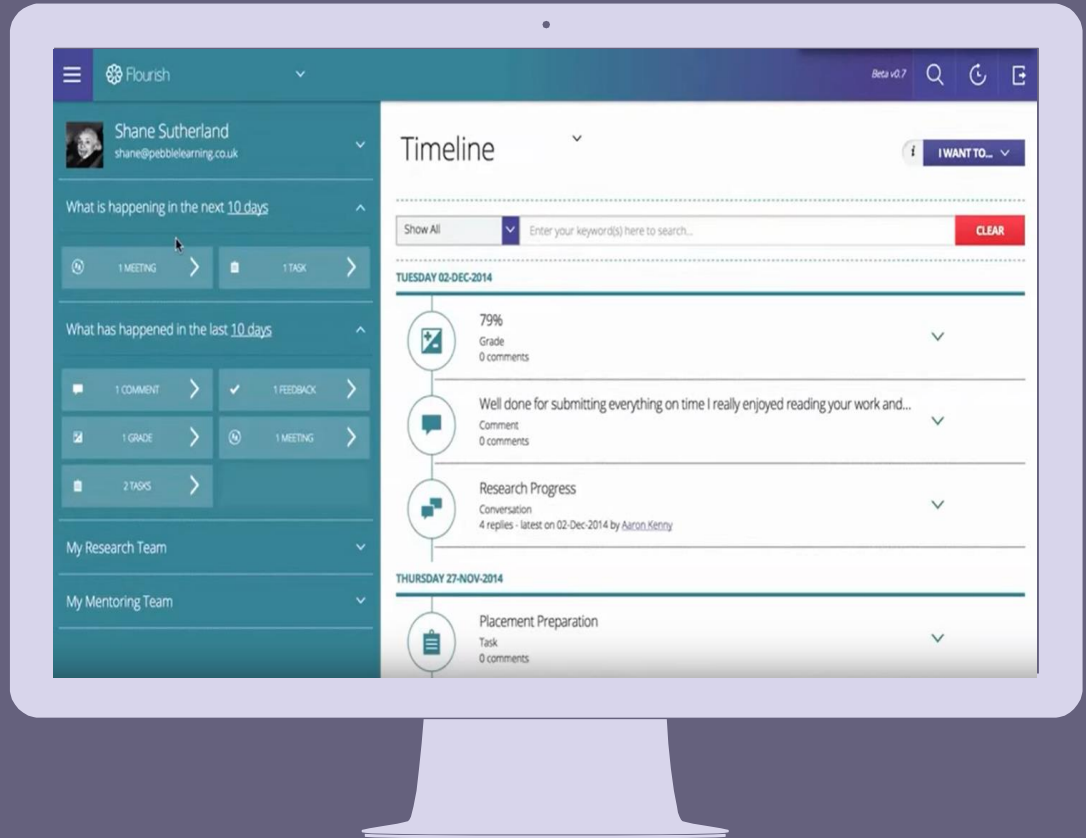
ATLAS

PebblePad



Flourish

PebblePad



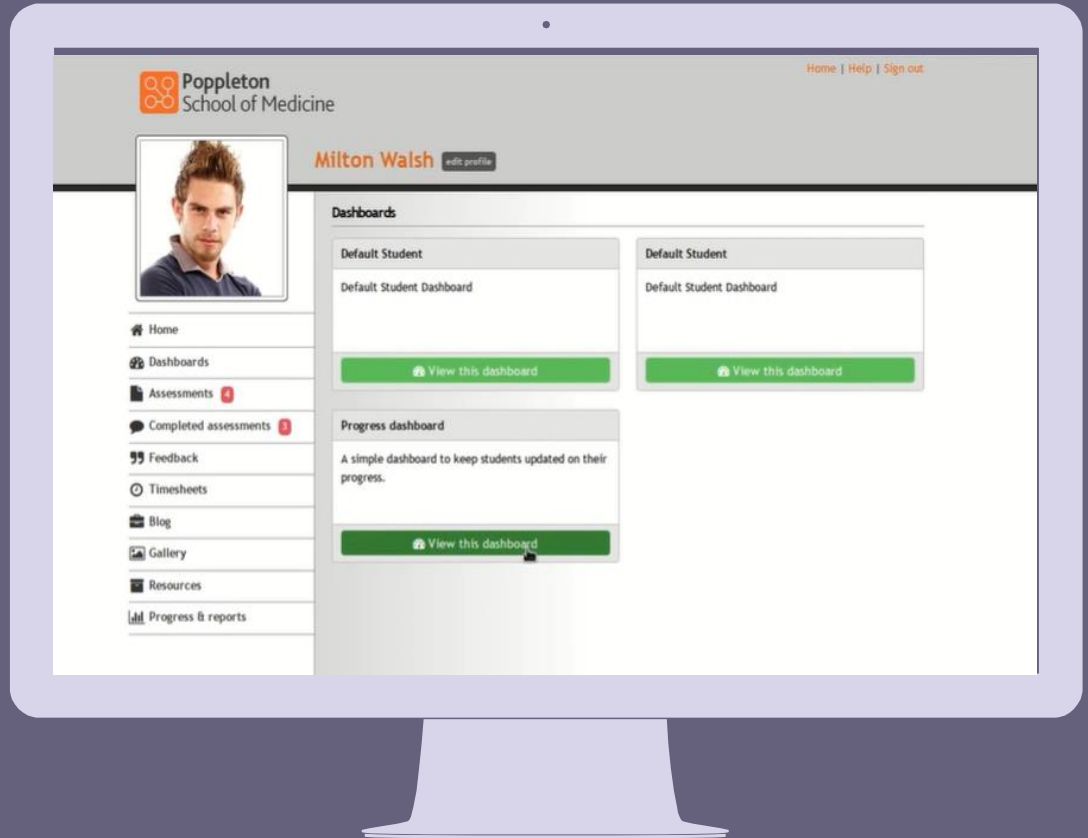
Focus



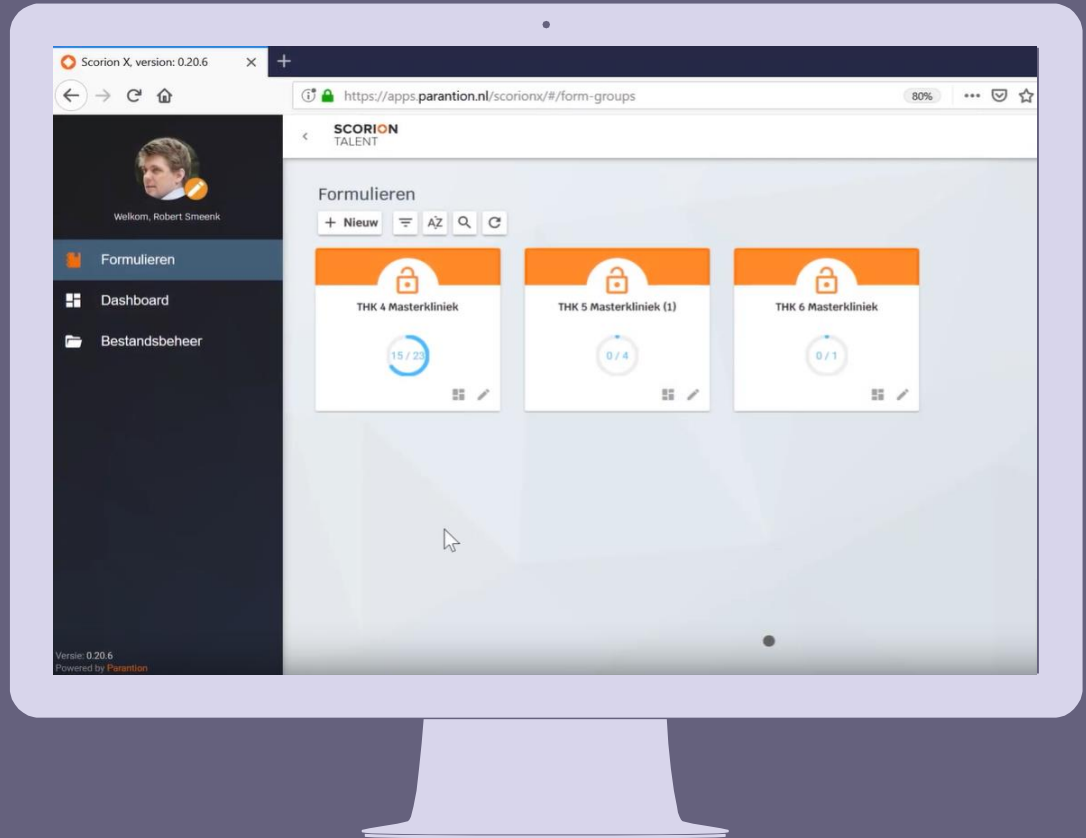
- Digital reflection and feedback/assessment



MyProgress



Scorion



EPASS

The screenshot shows the EPASS user interface on a computer monitor. The interface has an orange header bar with the text "DEMO mode" on the left and "help documentatie uitloggen" on the right. Below the header is a navigation menu with four icons: a globe for "DASHBOARD", a folder for "INVOER", a bar chart for "VOORTGANG", and a person icon for "PROFIEL". The "EPASS" logo is displayed in a dark grey box on the right side of the header.

Below the navigation menu, the breadcrumb "Home / Dashboard" is visible on the left, and "recent gebruikte functies" with a dropdown arrow is on the right. A message box states: "Het is mogelijk om in tekstvakken een link naar een ander formulier of blog, opgeslagen in uw portfolio, toe te voegen. Gebruik hiervoor het icoontje [link icon] in de werkbalk van de tekstvakken in formulieren en blogs."

The main content area is divided into several sections:

- Persoonsgegevens:** A profile section with a "Geen foto beschikbaar" placeholder on the left. To the right, the following information is listed: "Naam: Student GK", "Opleiding: UM Geneeskunde", "E-mailadres: toetsservicesysteem@maastrichtuniversity.nl", "Telefoonnr:", and "Totaal bijlagen: 0.01MB / 150MB". A "wizig gegevens" link is located below the profile information.
- Maastricht University:** A logo featuring a stylized 'U' and 'M' with the text "Maastricht University" and the tagline "Leading in Learning!" below it.
- Overzicht van niet gevalideerde formulieren:** A table with two columns: "Formulier" and "Datum". It lists two entries, both labeled "Zelfanalyse" with a date of "10-09-2013".
- Recente gebeurtenissen:** A section titled "Recente gebeurtenissen" with the text "Geen recente gebeurtenissen" below it.

Royal College

The screenshot shows a web browser window displaying the Royal College My Mainport learner dashboard. The browser address bar shows the URL <https://mainport-test.royalcollege.ca/cbd#/learner>. The page header includes the Royal College logo and navigation links: About Us, Our Members & Volunteers, Credentials, Examinations & Accreditations, Awards & Grants, Policy & Advocacy, and Resources. A 'Log Out' link is also present.

The main content area is titled 'CBD' and features a profile for 'Christina TestLearner04 Learner'. The profile includes a 'Change Image' button and the following details:

- Program: Anesthesiology
- Total for Program: 0 of 5
- Current Stage: Foundations of Discipline
- Stage Start Date: 03/23/2017
- Next Program Meeting:
- Learner Status: Progressing as Expected

To the right of these details is a section for 'EPIs Achieved' with four progress bars:

- 1 - Transition to DISCIPLINE: 0/0
- 2 - Foundations of DISCIPLINE: 0/5
- 3 - Core of DISCIPLINE: 0/0
- 4 - Transition to PRACTICE: 0/0

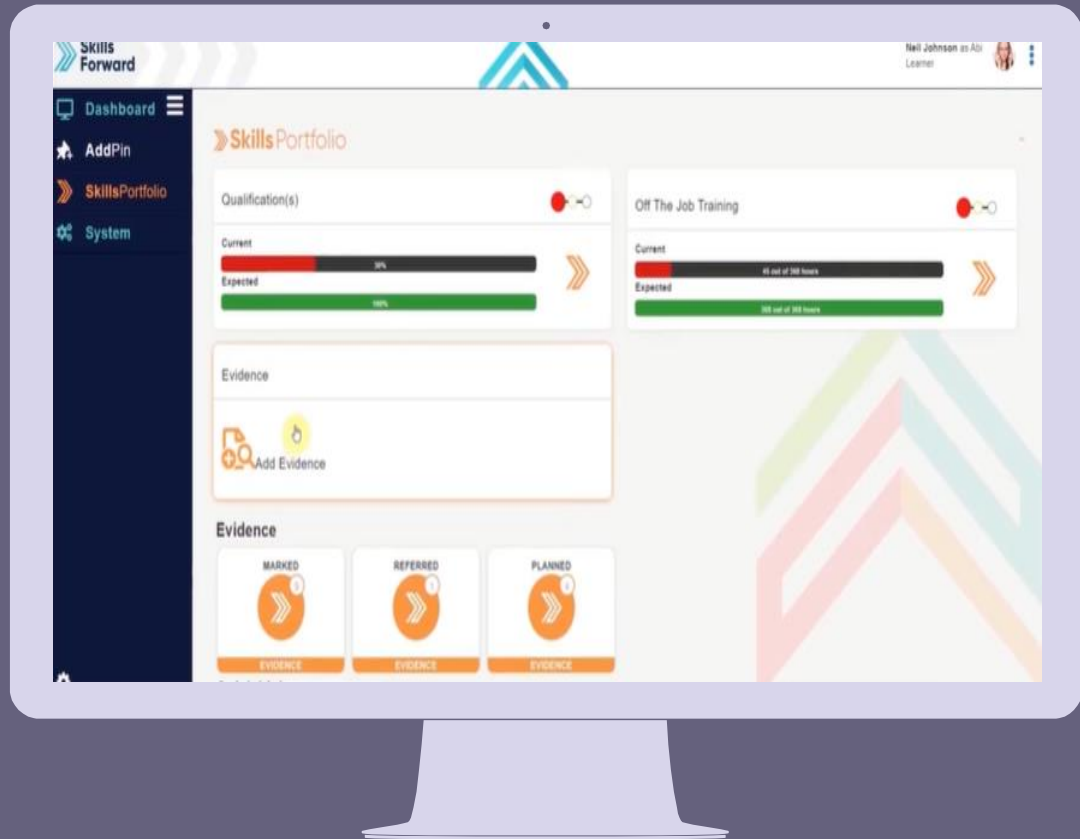
Below the progress bars is an 'Add Reflection' button and a section for 'Program Learning Plan (5)' with sub-sections for Reflections (0), Narratives (1), and Supporting Documentation (0). A 'Hide Achieved' button is also present.

The 'Foundations of Discipline (5)' section is expanded, showing a table with the following data:

EPA/EM	Status	Observations
2.2 Using the anesthetic assessment to generate the anesthetic considerations and the management plan, including postoperative disposition, for ASA 1, 2 or 3 patients	In Progress	1 of 10
2.3 Diagnosing and managing common (non-life-threatening) complications in the post-	In Progress	3 of 10

The Windows taskbar at the bottom shows the time as 2:00 PM on 03/23/2017.

Skills Portfolio



Focus

- Data management

PROGRESS IQ



ProgressIQ

The screenshot shows a web browser window displaying a student profile in ProgressIQ. The browser address bar shows the URL: <https://pmwu.progressiq.com/secure/snapshot/default.aspx>. The page title is "Comprehensive profile of student." Below the title, there are two dropdown menus: "1. Class:" set to "DO 2019" and "2. Student:" set to "ESC5CE97-F330-45BF-A".

The student's profile is identified by the ID "3b57adc0, ec2f8ceb". The profile includes a student photo, a smiley face icon, and a tabbed interface with "General", "Admissions", "MCAT", and "Personal" tabs. The "General" tab is active, showing the following information:

- Student ID: 616f66ea0
- Preferred Name: [Redacted]
- E-Mail: eb479c/ea099475284f@PWU.edu
- Current Class: DO 2019
- Admitted Class: 2019
- Group(s): [Redacted]
- Status: Active / [Redacted]
- Matriculation Date: [Redacted]
- Official Comment: [Redacted]
- Advisor: Brandon Isaacs (with advisor photo)

Below the profile information, there is a link: [Click here for instructions](#). A note states: "To edit the grades, double click on Course Scores icon [icon] to open the tool. Hover over icons to view the scores."

The page displays two tables of course scores:

OMS 1 - Fall				OMS 1 - Spring			
Name	Grade	Course Scores	Course Details	Name	Grade	Course Scores	Course Details
ANAT 505 - Gross Anatomy and Basic Neuroanatomy	80.49%	[icon]	[icon]	ANAT 506 - Gross Anatomy and Basic Neuroanatomy	84.72%	[icon]	[icon]
BIOMED 501 - Scientific Foundations of Medicine	74.05%	[icon]	[icon]	CLIN 502 - Clinical Skills I	94.82%	[icon]	[icon]
CLIN 501 - Clinical Skills I	92.55%	[icon]	[icon]	CLIN 506 - Community DOctoring I	81.21%	[icon]	[icon]
				CLIN 510 - Cardiovascular			

2. Facilitating communication

Between student,
mentor and supervisor



Facilitating Communication



Student → mentor/supervisor

- Reflection forms
- Private messages
- Comments and highlights
- Workspace

Student → Student

- Peer-review

Mentor/supervisor → Student

- Assessment forms
- Private messages
- Comments, highlights, feedback and approvals
- Workspace

- Forum in workspace

Mentor ↔ Supervisor

- Private messages
- Flags
- Approvals

- Private messages?

Facilitating Communication



Student →
mentor/supervisor

- Reflection forms

Mentor/supervisor →
Student

- Feedback/assessment forms

Mentor ↔ Supervisor

- Feedback/assessment forms

Student → Student

- Peer-assessment forms (except for Royal College)



Facilitating Communication

PROGRESS IQ

Student →
faculty/advisor

- Secure messaging
- Notes

Faculty/advisor →
Student

- Secure messaging
- Notes

Faculty ↔ Advisor

- Secure messaging
- Notes

System → Student, faculty and advisor

- Alerts



3. Planning learning

By student and/or
supervisor



Planning learning



PATHWAY

MILESTONE

TASK

TASK

TASK

MILESTONE

TASK

TASK

TASK

MILESTONE

TASK

TASK

TASK

Planning learning



ILP / Assessment Plan

QUALIFICATION

CRIT.

CRIT.

CRIT.

QUALIFICATION

CRIT.

CRIT.

CRIT.

QUALIFICATION

CRIT.

CRIT.

CRIT.

Planning learning

EPASS

- Student can set goals in 'Professional behavior'
- EPA progress



Planning learning

- EPA progress



PROGRESS IQ



Planning learning



- EPA progress
- Targets can be set for the student
- Course templates



4. Input by student

Which content can students create in the portfolio?



Input by student



- Filling in reflection/self-assessment templates (+ highlights & comments)
- Creating portfolios, pages, logs, blogs and templates
- These can contain text, videos, hyperlinks and audio
- All saved in the 'asset store' → Pebble+

Input by student

EPASS

SCORION

 Skills
Portfolio

 ROYAL COLLEGE
OF PHYSICIANS AND SURGEONS OF CANADA
COLLÈGE ROYAL
DES MÉDECINS ET CHIRURGIENS DU CANADA

- Filling in reflection/self-assessment templates
- Students can upload documents, photos, audio and video → evidence (EPASS: hyperlinks)



Input by student



- Filling in reflection/self-assessment templates



4. Input by supervisor

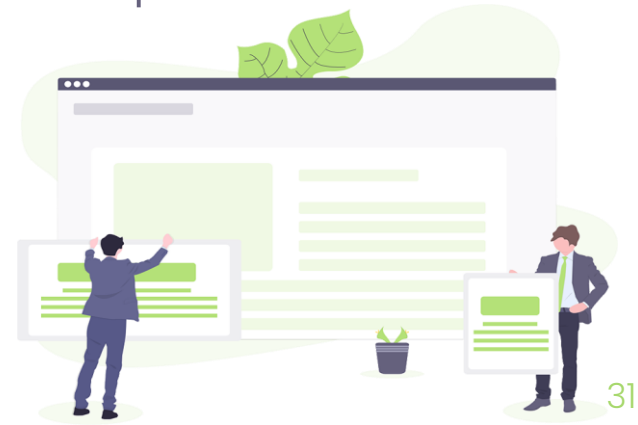
Which content can supervisors create in the portfolio?



Input by supervisor



- Comments, feedback, highlights, flags and grades
- Creating workbooks and templates
- Providing resources for students in workspaces



Input by supervisor



- Creating templates for reflection and feedback/assessment
- Filling in feedback/assessment forms: narrative feedback + grades
- Create dashboards (MyProgress)



Input by supervisor

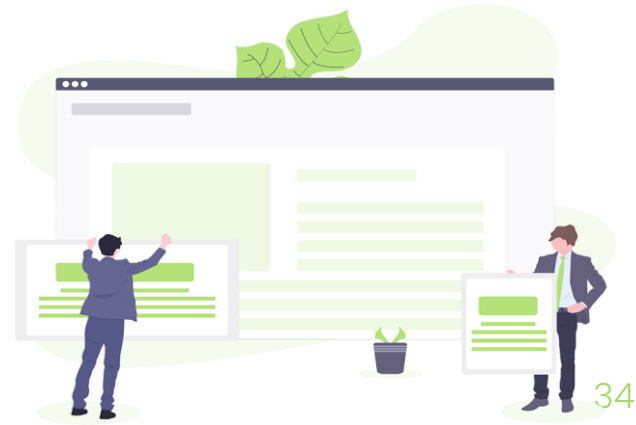
- Filling in feedback/assessment forms: narrative feedback + grades
- Adding evidence (any file) to an observation



Input by supervisor

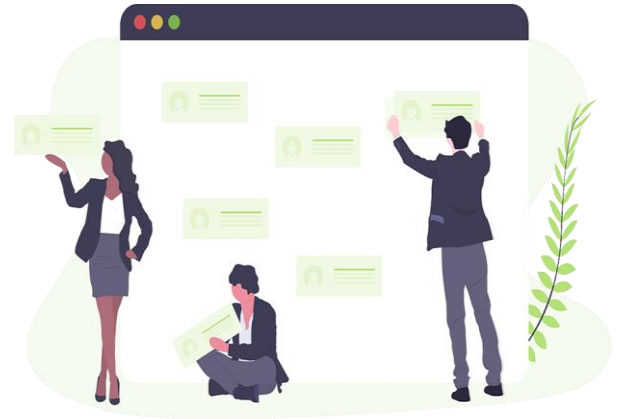
PROGRESS IQ

- Filling in feedback/assessment forms: narrative feedback + grades
- File uploads for memos and important documents



5. Feedback

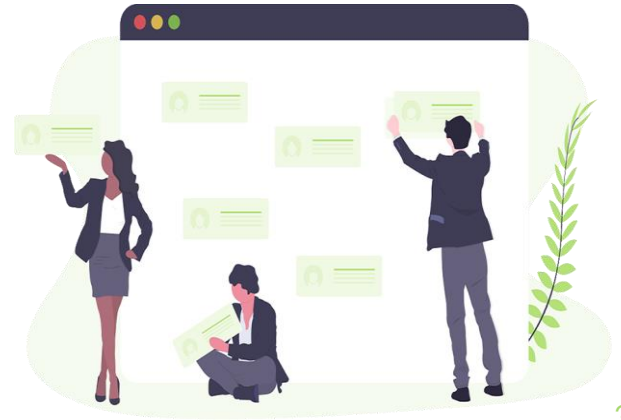
How is feedback given by assessors and provided for the student?



Feedback



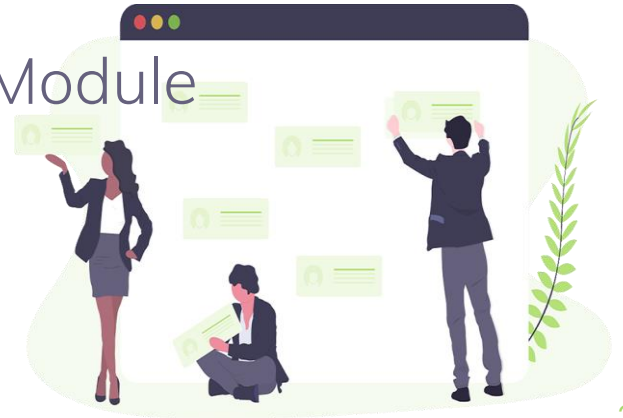
- 360° feedback
- Comments (informal) and feedback (formal)
- Live feedback
- Three-level approvals
- Peer-review in workspaces
- Feedback statements that can be (re)used by multiple assessors



Feedback

EPASS

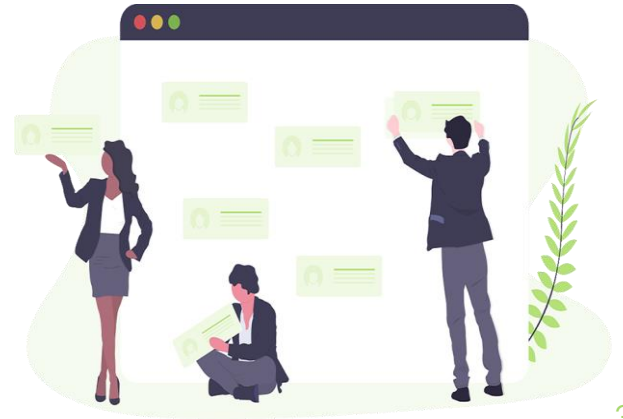
- 360° feedback
- JIT-feedback module that can code feedback as negative, neutral or positive
- Feedback in the Video Assessment Module



Feedback

SCORION

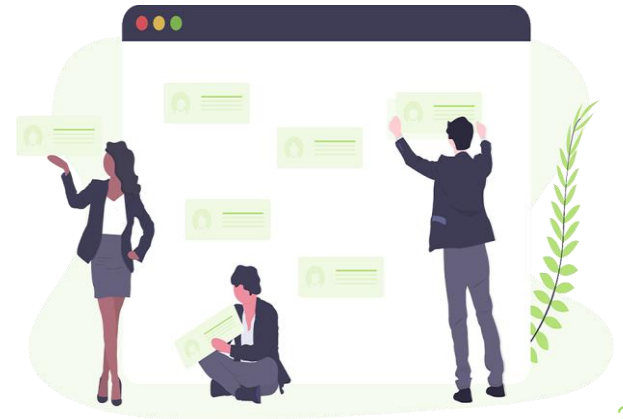
- 360° feedback
- Voice-to-text
- Audio feedback



Feedback

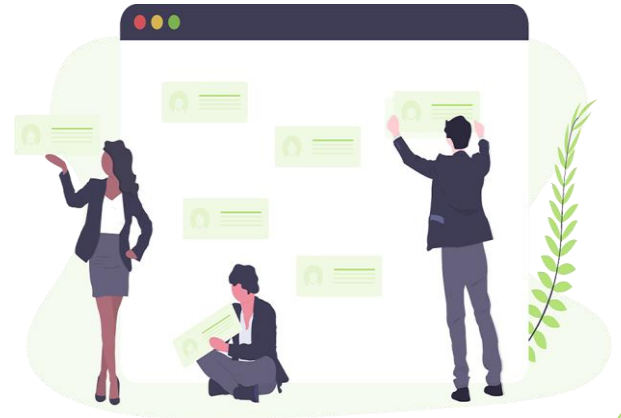


- 360° feedback
- Voice-to-text
- Video and audio feedback
- Control over timing & visibility



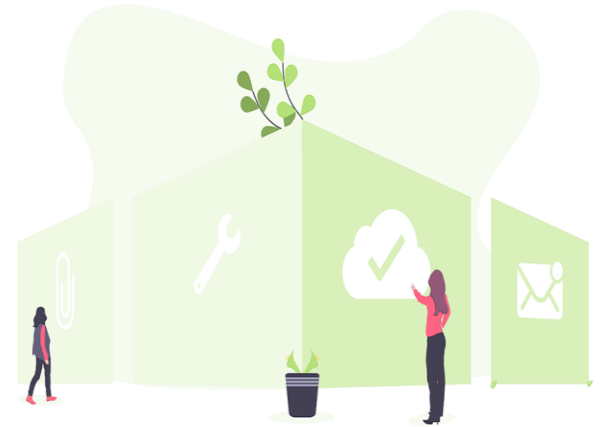
Feedback

- Feedback through observation forms
 - 'Form 1'
 - 'Form 2'
 - Narrative form
 - Multi-source feedback form



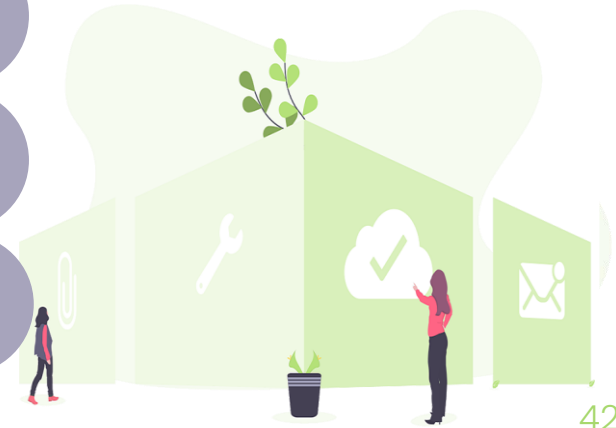
6. Assessment

How are students assessed?



Assessment

-  . Evaluation templates
-  . 360° assessment
-  . Digital signatures
-  . Control over timing & visibility
-  . Video assessment module



7. Visualization of progress

How is progress made visible in the ePortfolio?



Visualization of progress



6/7

. Spider diagrams



3/7

. Graphs



3/7

. Timelines



2/7

. Bar charts



2/7

. Pie charts



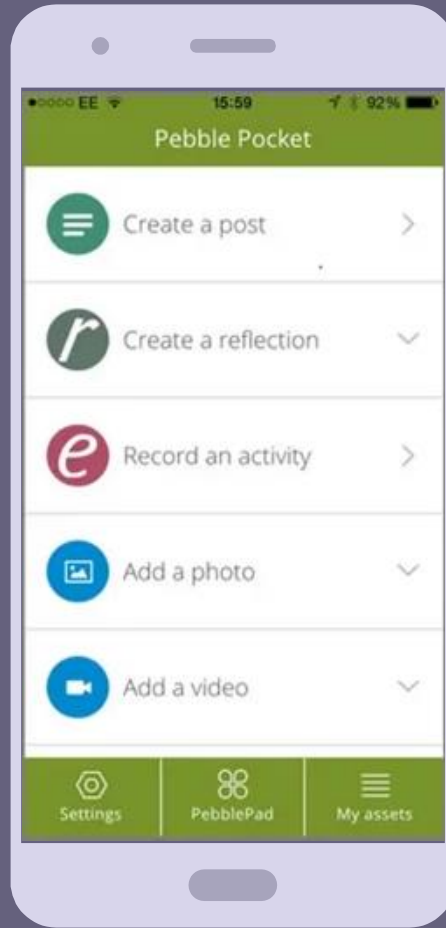
8. Mobile

How can users access the ePortfolio through their smartphone?



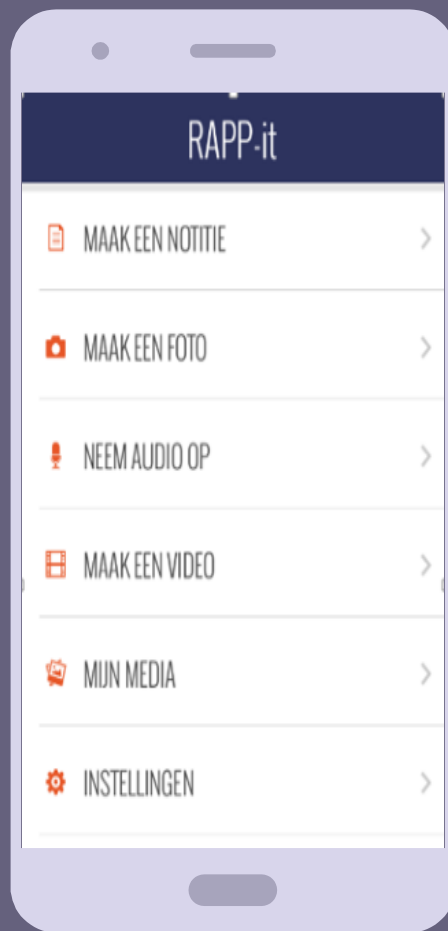
Pebble Pad

PebblePocket



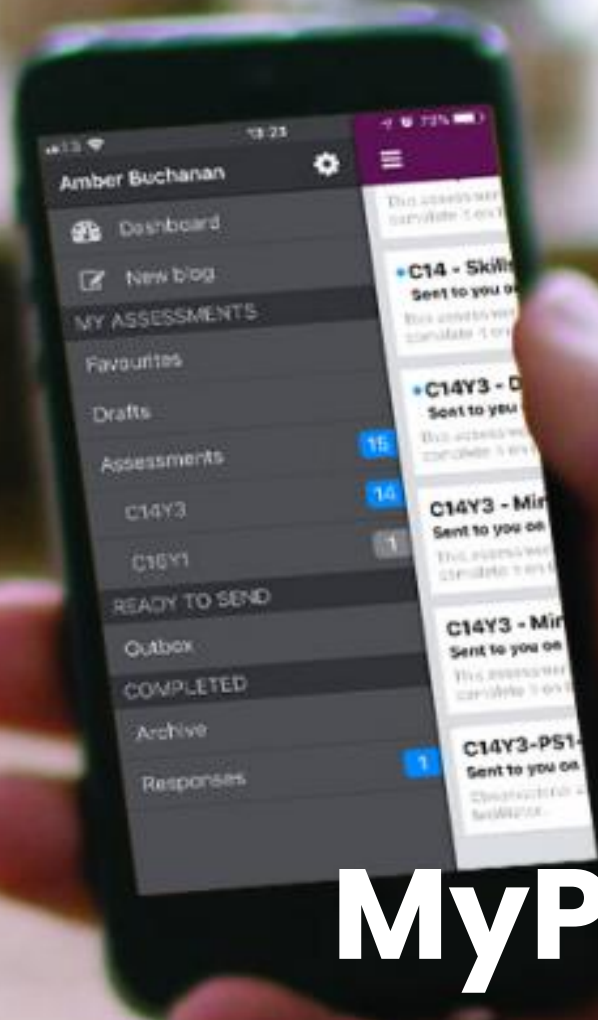
EPASS

RAPP-IT



Scorion App












MyProgress App

9. Smartness

Which smart features does the ePortfolio have?



Smartness

	 PebblePad	 Skills Portfolio	 ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF CANADA COLLÈGE ROYAL DES MÉDECINS ET CHIRURGIENS DU CANADA	 SCORION	 myprogress	 EPASS	 PROGRESS IQ
Data manager + reports	X	X	X	X	X	X	X
Tags to group input	X	X	X				
Speech-to-text				X	X		
Estimation of EPA level (coding of narrative FB + grades)						X	
Detecting when student is failing							X

10. Lab testing in times of corona

Possible alternative research methodology



User journey survey

Goal: determine what users think of the solution they are currently using.

Steps:

1. Define **key points** in the user journey
2. Set up a **survey** in Qualtrics
3. Ask respondents to **rate how they feel** about each of the key points applicable to their portfolio
4. Visualize and analyze the user journeys



User journey survey

Pitfalls:

- Make sure the respondents have a **common understanding** of each **key point**
- Make sure the respondents have a **common understanding** of what **each score** means
- Stimulate respondents to give a **qualitative explanation** of their quantitative score

Conjoint analysis

Goal: determine what users think of ePortfolio functionalities that are currently on the market

Steps:

1. Make a list of **functionalities** (e.g. facilitating communication)
2. Assign a set of **attributes** to each functionality (e.g. private messages)
3. Use conjoint analysis **software** (e.g. Sawtooth) to set up the study
4. Users choose between different **product offerings** with varying attributes
5. Analyze data to see which attributes are **least/most valued**

Conjoint analysis

Pitfalls:

- Respondents need to have a **thorough understanding** of what each **functionality** and **attribute** means.

Q-sorting

Goal: identify groups of users with a common view on what's good/bad about their/other ePortfolios

Steps:

1. Formulate Q-statements (e.g. It is important to me that an ePortfolio has a private messaging feature)
2. Set up a Q-sort structure in Q-sorting software
3. Ask respondents to sort the Q-statements in the structure
4. Conduct factor analysis on the data to identify groups of respondents with a similar view.

Q-sorting

“Plaats alle statements in de vakjes naargelang de mate waarin je ermee akkoord gaat.”



Minder mee akkoord

Meer mee akkoord

Q-sorting

Pitfalls:

- Q-statements need to be **representative** of a **concourse**
 - Use of focus group data?
 - Structured sampling approach
- Q-statements need to be provided **for each independent user group**
- Additional **qualitative data** can assist interpretation
 - Zoom + share screen + think aloud protocol?

Online user testing

Goal: detect points of pain in ePortfolios that are currently on the market

Steps:

1. Find test logins
2. Set up user tasks (e.g. user 'x' has logged a performed action, give feedback to the user)
3. Call potential users through Zoom
4. Give user task in the ePortfolio and follow through 'share screen' mode

Thanks!

Any questions?

