University of Huddersfield Repository

Covill, Carl and Hayles, Jean

Learning styles

Original Citation


This version is available at http://eprints.hud.ac.uk/10676/

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

• The authors, title and full bibliographic details is credited in any copy;
• A hyperlink and/or URL is included for the original metadata page; and
• The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

http://eprints.hud.ac.uk/
Learning Styles

Learning styles and preferences were first identified by researchers in the 1970’s. A number of different theories emerged, with many having been developed further over time.

People commonly have a main preferred learning style, but will rarely only respond to that style and may be a mix of different learning styles. If you have an awareness of different learning styles, you can adapt your teaching to suit the needs of your student to facilitate their learning in the practice environment.

There is no right or wrong learning styles, but there are types of learning which will be best suited to different learning styles.

There are a number of different theories identifying different learning styles, but the most commonly used are explored in more detail below.

**VAK Model (Fleming, 2000)**

The VAK model is one of the most popular models used to identify learning styles due to its simplicity. Some however would define the VAK model as a learning preference rather than a style.

VAK identifies that learners process information using the three main sensory receivers:

- VISUAL
- AUDITORY
- KINAESTHETIC (touch)

While all learners will use all three of the styles to some extent, most will have a dominant style.

**How can you identify a learner’s preferred style?**

You can pick up clues to spot a learner’s preferred style by listening to the words that they use:

*CC & JH*
April 2011
Learning Styles Handout
**Visual Learners:**
- Think in pictures
- Are quick to read body language / facial expression
- Have a preference for seen or written things
- May learn through written language
- May prefer charts, demonstrations, videos
- Remember things they have seen written down
- Respond better to teaching where they have a visual aid
- Seldom get lost in new environments

To help the visual learner to learn in practice:
- Use visual aids, such as manikins, pictures, graphs etc
- Encourage the learner to complete mind maps to help their learning
- Role play may be useful
- Encourage them to write important things in a note book to read through at a later date
- Need to study in a quiet place as they are easily distracted
- Let them watch you doing something before they attempt it themselves
- Give lists, written direction and instruction is possible

**Auditory Learners**
- Prefer to hear information
• May talk to themselves
• May move their lips when reading
• May have difficulty with reading and writing tasks
• Learn better from talking to a colleague
• Enjoy lectures
• Interpret the underlying meaning of speech through listening to tone of voice, pitch and speed
• Will remember all the words to songs!

To help the auditory learner to learn in practice:
• Tell them what they are going to learn, teach them, then tell them what they have learned!
• Question them to find out what they know beforehand, then you can fill in the gaps
• Use verbal brainstorming or discussions to develop understanding
• Encourage them to discuss ideas verbally with you and other members of the team
• Give verbal instructions / directions when asking them to do a new task
• Encourage them to read written information out loud

Kinaesthetic Learners
• Do best when touching, moving and doing
• Lose concentration easily if there is little or no external stimuli or movement
• Typically make notes copiously when listening to teaching
• May doodle whilst listening
• Never look at the instructions before trying something new!
• Learn best from a practical, hands on approach
• Find it difficult to sit still for prolonged periods

To help the kinaesthetic learner to learn in practice:
• Use activities where the learner has to do something, such as putting an anatomical model together correctly
• Encourage them to read and then transfer what they have learnt to another medium, e.g. mind map
• Encourage them to take notes while listening
• Don’t try to teach too much without giving them a break!

To identify your VAK learning style, see Learning Styles Questionnaire 1

CC & JH
April 2011
Learning Styles Handout
Honey & Mumford’s Learning Styles (1982)

Honey and Mumford identified 4 learning styles:

- ACTIVIST
- REFLECTOR
- THEORIST
- PRAGMATIST

These are thought to be acquired rather fixed personality characteristics. They can change depending upon circumstances or purposeful development of a different style.

Activists
Activists are likely to “jump in feet first” and get themselves fully involved in new experiences. They are open-minded rather than sceptical and this trait tends to make them very enthusiastic about anything new.

Their motto is “I’ll try anything once!”

They do have a tendency to act first and think later and they like to be active and busy. They thrive on new challenges and are easily bored. They often like to be the centre of attention.

To help an activist to learn in practice:
- Encourage them to brainstorm / mind map
- Keep them occupied with new learning to prevent them becoming bored
- Give them the opportunity to find out things for themselves rather than giving them all the information
- Encourage them to explore a number of possibilities instead of always thinking of the obvious
- Encourage them to prepare and think things through before jumping in
- Give them lots of new situations to enhance their learning

Pragmatists
Pragmatists are keen to try out new ideas and techniques to see if they work in practice. They will actively search out new ideas and like to experiment. They like to get on with things and will act quickly and confidently on things that attract them.
Their motto is “As long as it works, that’s OK”

They can be impatient with long-winded and protracted discussions as they are practical and down-to-earth individuals who just want to get on with it, often through trial and error.

To help a pragmatist learn in practice:
- Give them a specific task or project to focus on
- Encourage them to break large tasks into smaller sections
- Encourage them to use flow charts to illustrate ideas
- Give them the opportunity to test things out in practice
- Let them practice techniques and skills
- Encourage them to take time to look at all possibilities rather than just grabbing at the first solution
- Share your “hands on” expertise
- Give them practical tips to improve their practice
- Encourage them to try to be more people-orientated rather than just task-orientated

Theorists
Theorists like to think through problems in a logical, step-by-step fashion before coming up with solutions. They have a tendency to be perfectionists who will not rest easily until everything is neat and tidy and planned.

Their motto is "If it’s logical, then it’s good"

They thrive on asking questions and challenging assumptions, always wanting to know why, and will try to fit everything together like a jigsaw. They may appear a little detached, and may reject things out of hand which do not fit into their own particular mind-set.

To help a theorist learn in practice:
- Explore with them how the theory they have learned fits in with practice
- Encourage them to ask lots of questions
- Encourage them to keep a list of what they want to learn, and tick it off when they have achieved it
- Encourage them to think laterally rather than being rigid in their approach
• Encourage them to listen to the opinions of others
• Give them a clear structure / timetable of meetings to discuss their progress

Reflectors
Reflectors will tend to take a step back and observe what is going on, learning from experience and learning from lots of different perspectives. They will think things through thoroughly before coming to any decisions, and may try to put off coming to a conclusion for as long as possible.

Their motto is “you can’t be too careful”

They are deeply thoughtful and like to consider all possibilities and implications. They like to observe other people and will have a tendency to take a back seat in discussions and meetings. They will usually adopt a low profile in the workplace.

To help a reflector learn in practice:
• Give them all the information they need before asking them to come to a conclusion
• Give them the opportunity to discuss options with other team members to gain a better understanding of different perspectives
• Give them time to think things through before asking them for a decision
• Encourage them to reflect on experiences
• Encourage them to be a little more active in discussions as their confidence grows
• Encourage them to try to make timely decisions and not to be too cautious

To identify your learning style, see Learning Styles Questionnaire 2
Learning Styles Questionnaire 1

This questionnaire will help you to discover whether you are a VISUAL, AUDITORY or KINAESTHETIC learner.

Circle the answer that most represents how you generally behave.

(It’s best to complete the questionnaire before reading the accompanying explanation.)

1. When I operate new equipment I generally:
   a) read the instructions first
   b) listen to an explanation from someone who has used it before
   c) go ahead and have a go, I can figure it out as I use it

2. When I need directions for travelling I usually:
   a) look at a map
   b) ask for spoken directions
   c) follow my nose and maybe use a compass

3. When I cook a new dish, I like to:
   a) follow a written recipe
   b) call a friend for an explanation
   c) follow my instincts, testing as I cook

4. If I am teaching someone something new, I tend to:
   a) write instructions down for them
   b) give them a verbal explanation
   c) demonstrate first and then let them have a go

5. I tend to say:
   a) watch how I do it
   b) listen to me explain
   c) you have a go

6. During my free time I most enjoy:
   a) going to museums and galleries
   b) listening to music and talking to my friends
   c) playing sport or doing DIY
7. When I go shopping for clothes, I tend to:
   a) imagine what they would look like on
   b) discuss them with the shop staff
   c) try them on and test them out

8. When I am choosing a holiday I usually:
   a) read lots of brochures
   b) listen to recommendations from friends
   c) imagine what it would be like to be there

9. If I was buying a new car, I would:
   a) read reviews in newspapers and magazines
   b) discuss what I need with my friends
   c) test-drive lots of different types

10. When I am learning a new skill, I am most comfortable:
    a) watching what the teacher is doing
    b) talking through with the teacher exactly what I’m supposed to do
    c) giving it a try myself and work it out as I go

11. If I am choosing food off a menu, I tend to:
    a) imagine what the food will look like
    b) talk through the options in my head or with my partner
    c) imagine what the food will taste like

12. When I listen to a band, I can’t help:
    a) watching the band members and other people in the audience
    b) listening to the lyrics and the beats
    c) moving in time with the music

13. When I concentrate, I most often:
    a) focus on the words or the pictures in front of me
    b) discuss the problem and the possible solutions in my head
    c) move around a lot, fiddle with pens and pencils and touch things

14. I choose household furnishings because I like:
    a) their colours and how they look
    b) the descriptions the sales-people give me
    c) their textures and what it feels like to touch them

CC & JH
April 2011
Learning Styles Handout
15. My first memory is of:
   a) looking at something
   b) being spoken to
   c) doing something

16. When I am anxious, I:
   a) visualise the worst-case scenarios
   b) talk over in my head what worries me most
   c) can't sit still, fiddle and move around constantly

17. I feel especially connected to other people because of:
   a) how they look
   b) what they say to me
   c) how they make me feel

18. When I have to revise for an exam, I generally:
   a) write lots of revision notes and diagrams
   b) talk over my notes, alone or with other people
   c) imagine making the movement or creating the formula

19. If I am explaining to someone I tend to:
   a) show them what I mean
   b) explain to them in different ways until they understand
   c) encourage them to try and talk them through my idea as they do it

20. I really love:
   a) watching films, photography, looking at art or people watching
   b) listening to music, the radio or talking to friends
   c) taking part in sporting activities, eating fine foods and wines or dancing

21. Most of my free time is spent:
   a) watching television
   b) talking to friends
   c) doing physical activity or making things

22. When I first contact a new person, I usually:
   a) arrange a face to face meeting
   b) talk to them on the telephone
   c) try to get together whilst doing something else, such as an activity
      or a meal

CC & JH
April 2011
Learning Styles Handout
23. I first notice how people:
   a) look and dress
   b) sound and speak
   c) stand and move

24. If I am angry, I tend to:
   a) keep replaying in my mind what it is that has upset me
   b) raise my voice and tell people how I feel
   c) stamp about, slam doors and physically demonstrate my anger

25. I find it easiest to remember:
   a) faces
   b) names
   c) things I have done

26. I think that you can tell if someone is lying if:
   a) they avoid looking at you
   b) their voices changes
   c) they give me funny vibes

27. When I meet an old friend:
   a) I say “it’s great to see you!”
   b) I say “it’s great to hear from you!”
   c) I give them a hug or a handshake

28. I remember things best by:
   a) writing notes or keeping printed details
   b) saying them aloud or repeating words and key points in my head
   c) doing and practising the activity or imagining it being done

29. If I have to complain about faulty goods, I am most comfortable:
   a) writing a letter
   b) complaining over the phone
   c) taking the item back to the store or posting it to head office

30. I tend to say:
   a) I see what you mean
   b) I hear what you are saying
   c) I know how you feel

CC & JH
April 2011
Learning Styles Handout
Now add up how many A’s, B’s and C’s you selected.

\[
\begin{align*}
A\text{'s} &= \quad B\text{'s} &= \quad C\text{'s} = \\
\end{align*}
\]

If you chose mostly A’s you have a **VISUAL** learning style.

If you chose mostly B’s you have an **AUDITORY** learning style.

If you chose mostly C’s you have a **KINÄSTHETISCH** learning style.
Learning Styles Questionnaire 2

This questionnaire will help you to discover whether you are an ACTIVIST, PRAGMATIST, REFLECTOR or THEORIST.

Circle one statement in each section which is the most like you.

Then, check the answer guide at the end of the questionnaire to identify your preferred style.

1. If you are discussing something in a group, do you:
   a. Listen to others before you say anything?
   b. Want to get your opinion in first?
   c. Start thinking of lots of questions to ask?
   d. Come up with quick and simple solutions?

2. Your little son / daughter / nephew / niece asks you to help them build a complicated model out of Lego bricks. Do you:
   a. Carefully follow the instruction leaflet?
   b. Look at the picture on the box and work out how to do it?
   c. Just have a go?
   d. Suggest they have a go at something easier?

3. You are taking driving lessons. In your next driving lesson you will be learning how to negotiate roundabouts. Which method would you prefer your driving instructor to use?
   a. Just let you have a go?
   b. Be told beforehand how to do it so that you can think about it before the lesson?
   c. Watch it being demonstrated and then have a go?
   d. Discuss or read about how to do it first?

4. When you go to a café / restaurant for a meal, do you:
   a. Read what’s on the menu beforehand?
   b. Go along and see what there is?
   c. Have an idea of what you want within your budget before you go?
   d. Choose a balanced meal?
5. You have put in the right money and pressed the right button but nothing has come out of the snacks machine. Do you:
   a. Thump the machine?
   b. Press all the buttons in the hope that something happens?
   c. Read the instructions to see what you can do?
   d. Report it as broken?

6. When you are going to play a new computer game or use a new programme, do you:
   a. Read the manual before you start the game / programme?
   b. Just have a go and pick it up as you go along?
   c. Watch someone else, see what to do and then have a go yourself?
   d. Ask someone to show you what to do?

7. You have lost your timetable and can't remember what the next lesson is. Do you:
   a. Find someone else from your group and follow them?
   b. Rush up and down trying to find the right room?
   c. Think back to where you were last week?
   d. You wouldn't lose your timetable, you always have a spare one?

8. How do you approach revision? Do you:
   a. Have a revision timetable with a colour-coded list of what you need to do?
   b. Think carefully about what you need to do?
   c. Start with whatever book comes to hand first?
   d. Start with what you enjoy most and know you will be good at?

9. Two of your close friends have fallen out. Would you:
   a. Jolly them back into being friends?
   b. Try to find out what the problem is?
   c. Arrange an event for both of them to be at so they can make up?
   d. Take your time thinking how to resolve the problem?
10. At a party, do you prefer to:
   a. Stay in one place and watch what’s going on?
   b. Dance the night away?
   c. Find someone to talk to?
   d. Help keep the party going?

**Answer Guide:**

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reflector</td>
<td>Activist</td>
<td>Theorist</td>
<td>Pragmatist</td>
</tr>
<tr>
<td>2</td>
<td>Theorist</td>
<td>Pragmatist</td>
<td>Activist</td>
<td>Reflector</td>
</tr>
<tr>
<td>3</td>
<td>Activist</td>
<td>Reflector</td>
<td>Pragmatist</td>
<td>Theorist</td>
</tr>
<tr>
<td>4</td>
<td>Theorist</td>
<td>Activist</td>
<td>Reflector</td>
<td>Pragmatist</td>
</tr>
<tr>
<td>5</td>
<td>Activist</td>
<td>Pragmatist</td>
<td>Theorist</td>
<td>Reflector</td>
</tr>
<tr>
<td>6</td>
<td>Theorist</td>
<td>Activist</td>
<td>Reflector</td>
<td>Pragmatist</td>
</tr>
<tr>
<td>7</td>
<td>Pragmatist</td>
<td>Activist</td>
<td>Reflector</td>
<td>Theorist</td>
</tr>
<tr>
<td>8</td>
<td>Theorist</td>
<td>Reflector</td>
<td>Activist</td>
<td>Pragmatist</td>
</tr>
<tr>
<td>9</td>
<td>Activist</td>
<td>Theorist</td>
<td>Pragmatist</td>
<td>Reflector</td>
</tr>
<tr>
<td>10</td>
<td>Reflector</td>
<td>Activist</td>
<td>Theorist</td>
<td>Pragmatist</td>
</tr>
</tbody>
</table>

Count up your responses to find your preferred learning style